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As filed with the Securities and Exchange Commission on July 1, 2021

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Caribou Biosciences, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**2836**	**45-3728228**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification No.)**

2929 7th Street, Suite 105
Berkeley, CA 94710
(510) 982-6030
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Rachel E. Haurwitz, Ph.D.
President and Chief Executive Officer
Caribou Biosciences, Inc.
2929 7th Street, Suite 105
Berkeley, California 94710
(510) 982-6030
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Ashok W. Mukhey, Esq. **Wendy A. Grasso, Esq.** **Reed Smith LLP** **1901 Avenue of the Stars, Suite 700** **Los Angeles, California 90067** **(310) 734-5200**	**Barbara G. McClung, Esq.** **Chief Legal Officer and Corporate Secretary** **Caribou Biosciences, Inc.** **2929 7th Street, Suite 105** **Berkeley, California 94710** **(510) 982-6030**	**Ilir Mujalovic, Esq.** **Shearman & Sterling LLP** **599 Lexington Avenue** **New York, New York 10022** **(212) 848-4000**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title Of Each Class of Securities To Be Registered	**Proposed Maximum Aggregate Offering Price(1)(2)**	**Amount Of Registration Fee(2)**
Common Stock, par value $0.0001 per share	$100,000,000	$10,910

(1) Includes the aggregate offering price of additional shares that the underwriters have an option to purchase.
(2) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion
Preliminary Prospectus dated July 1, 2021

PROSPECTUS

Shares

Common Stock

This is Caribou Bioscience, Inc.'s initial public offering. We are selling shares of our common stock.

We expect the public offering price for our common stock to be between $ and $ per share. Currently, no public market exists for the shares of our common stock. After pricing of the offering, we expect that the shares will trade on the Nasdaq Global Select Market under the symbol "CRBU."

We are an "emerging growth company" under the federal securities laws and are subject to reduced public company disclosure standards. See the section titled "Prospectus Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company."

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 16 of this prospectus.

	Per Share	Total
Public offering price	$	$
Underwriting discount (1)	$	$
Proceeds, before expenses, to us	$	$

(1) We refer you to "Underwriting" beginning on page 220 of this prospectus for additional information regarding underwriting compensation.

The underwriters may also exercise their option to purchase up to an additional shares of common stock from us, at the initial public offering price, less the underwriting discount, for 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares will be ready for delivery on or about , 2021.

Joint Book-Running Managers

BofA Securities **Citigroup** **SVB Leerink**

The date of this prospectus is , 2021.

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We and the underwriters have not authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus or in any applicable free writing prospectus is accurate only as of the date of this prospectus or any such free writing prospectus, as applicable, regardless of its time of delivery or of any sale of our common stock. Our business, financial condition, results of operations, and future growth prospects may have changed since that date.

For investors outside the United States: Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of our common stock and the distribution of this prospectus outside of the United States.

Trademarks

We have registered Caribou Biosciences, Caribou, Site-Seq, and our logo as trademarks in the United States and certain other jurisdictions. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork, and other visual displays, may appear without the ® or ™ symbols, but in the case of our trademarks and trade names or those of our licensors, such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks, or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

PROSPECTUS SUMMARY

This summary highlights information included elsewhere in this prospectus. This summary does not contain all the information you should consider before investing in our common stock. You should read and consider this entire prospectus carefully, including the sections titled "Risk Factors," "Special Note Regarding Forward-Looking Statements" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus, before making any investment decision. Unless the context otherwise requires, the terms "Caribou," "Caribou Biosciences," the "Company," "we," "us" and "our" relate to Caribou Biosciences, Inc., together with its consolidated subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company dedicated to transforming the lives of patients with devastating diseases by applying our novel CRISPR platform, **C**RISPR **h**ybrid **R**NA-**DNA**, or chRDNA, pronounced "chardonnay," toward the development of next-generation, genome-edited cell therapies. Our renowned founders, including a Nobel laureate, are pioneers in CRISPR genome editing. Our chRDNA technology has demonstrated superior specificity and high efficiency in preclinical studies, which enables us to perform multiple, precise genomic edits, while maintaining genomic integrity.

We believe that our technology has broad potential to generate gene and cell therapies in oncology and in therapeutic areas beyond oncology, including immune cell therapies, cell therapies derived from genome-edited iPSCs, and *in vivo* genome-editing therapies.

The genome-editing technologies currently used in the allogeneic cell therapy field generally have limited efficiency, specificity, and versatility for performing the multiple, precise genomic edits necessary to address insufficient persistence. Our chRDNA technology is designed to address these genome-editing limitations and improve cell therapy activity. By applying this approach to allogeneic cell therapies, we believe we can unlock their full potential by improving upon their effectiveness and durability.

We are initially focused on advancing multiple proprietary allogeneic cell therapies for the treatment of both hematologic malignancies and solid tumors against cell surface targets for which autologous CAR-T cell therapeutics have previously demonstrated clinical proof of concept, including both CD19 and BCMA, as well as new targets. We use our chRDNA technology to enhance, or armor, our cell therapies by creating additional genomic edits to improve persistence of antitumor activity. The current status of our programs is summarized below.

Proprietary pipeline

Program	Cell type	Target	Editing	Indications	Discovery	IND enabling	Phase 1	Phase 2	Phase 3*	Anticipated milestones
CB-010	T cell	CD19	CAR into TRAC armoring: PD-1 KO	r/r B-NHL	●	●	●	○	○	initial data expected in 2022
CB-011	T cell	BCMA	CAR into TRAC armoring: B2M KO, B2M-HLA-E insertion	r/r MM	●	○	○	○	○	IND filing 2022
CB-012	T cell	CD371	armoring	r/r AML	●	○	○	○	○	IND filing 2023
CB-020	iNK cell	undisclosed	armoring	solid tumors	●	○	○	○	○	target selection 2022

* Phase 3 may not be required if phase 2 is registrational.

Our first lead product candidate, CB-010, is, to our knowledge, the first clinical-stage allogeneic anti-CD19 CAR-T cell therapy with PD-1 removed from the CAR-T cell surface by a genome-edited knockout of the

PDCD1 gene. We have demonstrated in preclinical models that the PD-1 knockout improves the persistence of antitumor activity by disrupting a pathway that leads to rapid T cell exhaustion. We have dosed the first patient in our ANTLER phase 1 clinical trial for CB-010, a study in patients with relapsed or refractory B cell non-Hodgkin lymphoma, with initial data expected in 2022.

Our second lead product candidate, CB-011, is an allogeneic CAR-T cell product candidate and is, to our knowledge, the first anti-BCMA CAR-T cell therapy incorporating an immune cloaking approach that includes both the removal of the endogenous B2M protein and insertion of a B2M–HLA-E transgene. This strategy is designed to blunt CAR-T cell rejection by both patient T cells and NK cells to enable more durable antitumor activity. CB-011 is in preclinical development for relapsed or refractory multiple myeloma, with an IND filing expected in 2022.

Our CB-012 program is an allogeneic armored CAR-T cell therapy targeting CD371, currently in preclinical development for the treatment of relapsed or refractory acute myeloid leukemia with an IND filing expected in 2023. CD371 is an attractive target for acute myeloid leukemia due to its expression on myeloid cancer cells, its enrichment in leukemic stem cells, and its absence on hematopoietic stem cells.

We are also developing allogeneic CAR-NK cell therapies derived from genome-edited iPSCs for the treatment of solid tumors. These CAR-NK product candidates will contain genomic edits designed to overcome the challenges of targeting solid tumors, including trafficking, heterogeneity, and the immunosuppressive tumor microenvironment.

We control a robust patent portfolio protecting our chRDNA technology as well as certain of our allogeneic cell therapy targets.

In February 2021, we entered into a collaboration with AbbVie Manufacturing Management Unlimited Company, or AbbVie, to develop two new CAR-T cell therapies for AbbVie. We view this collaboration as an external recognition of the potential for our chRDNA genome-editing technology to significantly improve genome-editing specificity and efficiency.

Current Challenges in Allogeneic Cell Therapies

Immune cell therapies have emerged as a revolutionary and potentially curative treatment for hematologic malignancies and solid tumors. The approval and launch of multiple first generation CD19- or BCMA-directed autologous CAR-T cell products have laid the foundation and opened a path for the development of more advanced cell therapeutics, including CAR-T and CAR-NK cell products with next-generation capabilities and approaches. Among these approaches, allogeneic cell therapy is positioned to unlock the broad potential of engineered immune cells as a leading therapeutic modality. However, expansion, persistence, and trafficking of allogeneic CAR-T and CAR-NK cells are critical to achieving long-term efficacy. We believe that the genome-editing technologies currently utilized in the allogeneic cell therapy field have limited efficiency, specificity, and versatility for performing the multiplex editing necessary to address these challenges.

Genome-Editing Landscape and Limitations

There are several well-established genome-editing technologies being applied to generate immune cell therapies currently in preclinical research or clinical development, including ZFNs, TALENs, and meganucleases, but each has limitations with respect to both their agility and their ability to generate site-specific gene insertions with high efficiency. More recently, clustered regularly interspaced short palindromic repeats, or CRISPR, genome-editing technology has been used for the generation of *ex vivo* immune cell therapeutics that are in preclinical research or clinical development.

The canonical CRISPR system utilizes Cas9, a protein that can cut genomic DNA. Cas9 is targeted to a specific site in a genome by a guide RNA. One of the drawbacks of CRISPR-Cas9 genome editing is the occurrence of off-target editing. Off-target edits can alter an oncogene or tumor suppressor gene, impact the biology of the target cell, or have other negative consequences on therapeutic development. Additionally, the simultaneous occurrence of both on-target and off-target edits may lead to genomic rearrangements including chromosomal translocations that may be problematic for immune cell therapeutics, especially for ones requiring multiple edits.

Our chRDNA Technology

We have invented a new CRISPR genome-editing platform, our chRDNA technology, which uses novel and proprietary hybrid guides for editing DNA, providing a powerful tool with the potential to expand the use of allogeneic cell therapies. See figure 1. The advantages of our technology include:

- *Significantly improved genome-editing specificity*: The use of our chRDNA guides leads to a high degree of editing specificity with lower levels of off-target events compared to first generation CRISPR-Cas9. See figure 2.
- *High efficiency*: We achieve a high degree of on-target gene knockout and insertion efficiency, facilitating robust multiplex editing including multiple gene insertions. See figure 2.
- *Versatility across a broad range of cell types*: Our chRDNA guides are compatible with multiple types of Cas proteins, including Cas9 and Cas12a, providing us the flexibility to apply our technology to many cell types including immune cells and stem cells.
- *Simple chemical synthesis*: Our chRDNA guides are manufactured via chemical synthesis using readily available technologies.

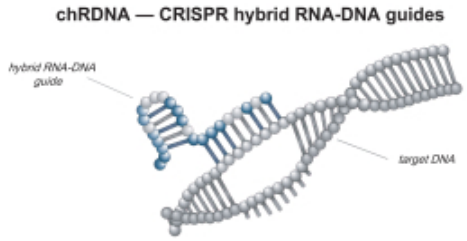

Figure 1. *Our chRDNA guides are hybrid molecules that contain both RNA and DNA nucleotides. They enable significantly improved specificity compared to first generation all-RNA guides.*

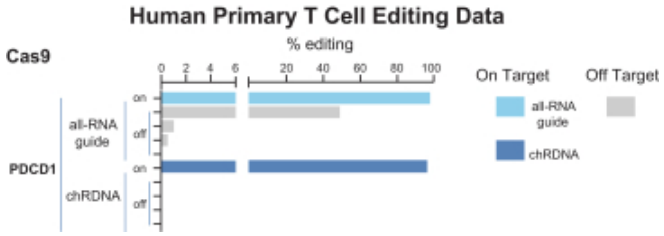

Figure 2. *chRDNA guides significantly improve genome-editing specificity relative to all-RNA guides. We edited the gene encoding PD-1, called PDCD1, in the same genomic location using either an all-RNA guide or a chRDNA guide. In this instance, the all-RNA guide results in multiple, high efficiency off-target edits, whereas the chRDNA guide yields no off-target editing down to our limit of detection.*

We have successfully demonstrated multiplex genome editing with our chRDNA technology, including multiplex gene insertion. We believe this level of editing sophistication has the potential to unlock the broad use of allogeneic cell therapies by:

- *Increasing the persistence of allogeneic cell therapies, thereby potentially achieving long-term efficacy:* Our chRDNA technology enables us to apply multiple orthogonal approaches to armor

allogeneic CAR-T cells, including (i) knockout of PD-1 to disrupt a pathway that leads to CAR-T cell exhaustion and (ii) immune cloaking CAR-T cells to prevent rapid rejection by the patient's immune system. See figure 3. Our preclinical mouse xenograft data demonstrate that the PD-1 knockout results in a significant survival advantage compared to conventional allogeneic CAR-T cells without a PD-1 knockout. See figure 4.

- *Improving the genomic integrity of our products*: We have observed that our product candidates have significantly lower levels of off-target edits compared to those made with first generation CRISPR-Cas9, and we believe we can make multiple edits while maintaining genomic integrity.

- *Expanding into solid tumors*: We are also focused on developing genome-edited, off-the-shelf CAR-NK cell therapies for the treatment of solid tumors. In our preclinical studies to date, we have observed that our chRDNA technology can precisely edit iPSCs and through a proprietary process, we generate genome-edited, iNK cells that are armored to enhance efficacy, trafficking, targeting, and/or persistence.

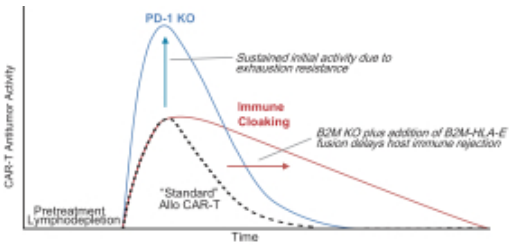

Figure 3. *We employ multiple armoring strategies to improve allogeneic CAR-T cell persistence.*

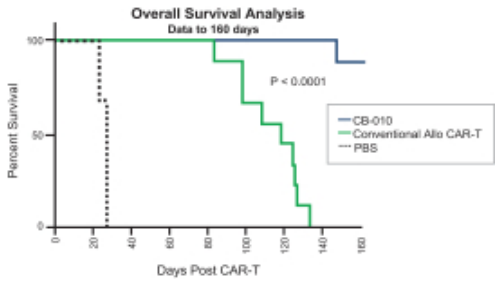

Figure 4. *In vivo preclinical mouse xenograft data demonstrate that the PD-1 knockout results in a significant survival advantage relative to a conventional allogeneic CAR-T cell therapy that expresses PD-1.*

Our Pipeline

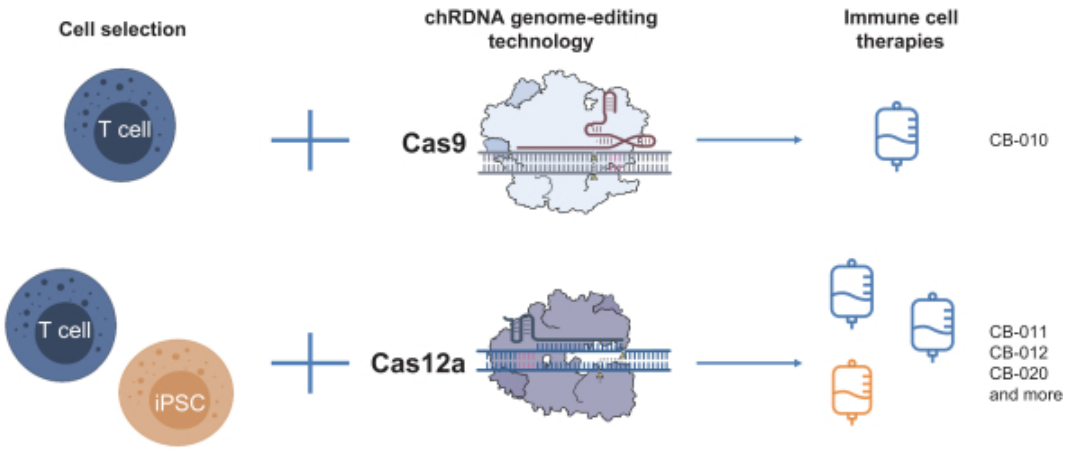

Figure 5. *We use Cas9 and Cas12a in the development of our allogeneic cell therapies.*

CB-010

Our most developed product candidate is CB-010, an allogeneic anti-CD19 CAR-T cell therapy. We use Cas9 chRDNA guides to make three edits to manufacture CB-010. We introduce, with high efficiency and specificity, the gene encoding the CD19-specific CAR into the gene encoding the T cell receptor alpha constant, or *TRAC*, a component of the native T cell receptor, or TCR. This simultaneously integrates the CD19 CAR site-specifically into the T cell genome and eliminates TCR expression to reduce the risk of graft versus host disease, or GvHD. We also knock out the gene encoding the PD-1 protein in these cells to boost the persistence of CAR-T cell antitumor activity. We believe that the PD-1 knockout has the potential to reduce the likelihood of rapid tumor recurrence and potentially confer a better therapeutic index compared to other allogeneic CAR-T cells. To our knowledge, CB-010 is the first allogeneic CAR-T cell therapy with a PD-1 knockout in clinical studies and it is being evaluated in our open-label, multicenter ANTLER phase 1 clinical trial in the United States in adults with relapsed or refractory B cell non-Hodgkin lymphoma (NCT04637763). We have dosed the first patient in this clinical trial. We expect to have initial data from this clinical trial in 2022.

CB-011

CB-011 is an allogeneic, BCMA CAR-T cell therapy for the treatment of relapsed or refractory multiple myeloma. To our knowledge, CB-011 will be the first allogeneic CAR-T cell therapy immune cloaked to prevent both T- and NK-mediated clearance, or rejection, by the immune system. We expect our immune cloaking strategy to drive CAR-T cell persistence, enabling more durable antitumor activity. We use Cas12a chRDNA guides to make four edits to manufacture CB-011. We introduce the gene that encodes a novel and proprietary humanized anti-BCMA CAR into the *TRAC* locus with high specificity and efficiency, thus eliminating TCR expression to prevent GvHD and integrating the BCMA CAR site-specifically into the T cell genome. In addition, we insert a gene encoding a B2M–HLA-E fusion protein into the native *B2M* gene locus. This approach simultaneously prevents the expression of the native B2M protein, a protein that stabilizes all HLA class I antigens on the cell surface, thereby eliminating endogenous HLA class I presentation on the surface of the CAR-T cells, and stably expresses HLA-E, a minor HLA class I antigen, to blunt both T- and NK-mediated rejection of the CAR-T cell therapy by the patient's immune system. We expect to file an IND for this product candidate in 2022.

CB-012

CB-012 is an allogeneic, anti-CD371 CAR-T cell therapy for the treatment of relapsed or refractory acute myeloid leukemia. CD371 is expressed on the surface of acute myeloid leukemia tumor cells and leukemic stem cells, but it is not expressed on normal hematopoietic stem cells which makes it a compelling target for the treatment of acute myeloid leukemia. We are applying our genome-editing expertise to armor the CB-012 CAR-T cell product candidate in order to drive persistence and seek maximum patient benefit in relapsed or refractory acute myeloid leukemia. We expect to file an IND for this product candidate in 2023.

CB-020

We believe that edited iNKs, including CAR-iNKs, hold significant potential for treating a variety of solid tumors. We have successfully demonstrated the ability to edit the genome of iPSCs at multiple loci and we have developed a robust differentiation protocol to derive iNKs from iPSCs, providing an optimal system for generating multiplex-edited iNKs that have the potential to address the fundamental challenges facing immune cell therapies in the immunosuppressive tumor microenvironment. We expect to select a cell-surface target for our CB-020 product candidate in 2022.

Our History

Our Team

Our team and our culture are critical to realizing our vision of advancing agile genome-editing innovations for the benefit of our communities. We were founded in 2011 by globally-recognized leaders in CRISPR and nucleic acid biology: Jennifer A. Doudna, Ph.D., who was a co-recipient of the 2020 Nobel Prize in Chemistry for the development of CRISPR-Cas9 as a method for genome editing; Martin Jinek, Ph.D., Assistant Professor at the University of Zurich in the Department of Biochemistry; James Berger, Ph.D., Professor in the Department of Biophysics and Biophysical Chemistry at the Johns Hopkins University School of Medicine; and Rachel E. Haurwitz, Ph.D., who has served as our President and Chief Executive Officer since our founding. Drs. Doudna and Jinek serve on our SAB, which also includes world experts in immuno-oncology therapeutics, T cell metabolism and tumor interactions, iPSC biology and differentiation, clinical trial development, and patient care.

We have attracted a talented group of experienced scientists, drug development experts, and company builders as part of a passionate team of over 65 employees. Throughout their combined careers, our team members have contributed to at least 49 IND submissions; 94 clinical trials, of which 40 were for oncology indications; 13 product approvals; and 11 product launches. Our research and development team includes scientists, engineers, and clinicians who are experts in genome-editing technologies, cellular engineering, computational biology, genome sequencing and analysis, structural biology, chemistry, lab automation, translational medicine, and the manufacturing of CRISPR reagents and cell therapies. Our team includes many of the scientists and engineers who invented the technologies we use today in our research and product development, including Paul Donohoue, a co-inventor of the chRDNA genome-editing technology, who continues to drive innovation as the leader of our platform discovery group.

We are driven by our shared values. We open our minds to new ideas and welcome diverse perspectives. We proudly assert that teams do their best work when their members are personally engaged, their ideas are taken seriously, their contributions are recognized, and their needs are met.

Our Values

- *Leaders in Genome Editing*: Passionate and relentless in our pursuit of innovation
- *Collaboration*: Shaping a better future together
- *Scientific Excellence*: Innovating solutions to advance scientific applications
- *Community Engagement*: Addressing society's needs through open dialogue
- *Integrity*: Operating with the highest level of integrity
- *Personal Development*: Empowering and supporting one another
- *Respectful and Inclusive*: Everyone is a necessary contributor to our success

Our Key Investors and our Financing History

Since our founding in 2011, we have raised approximately $150.1 million in net proceeds from equity capital invested by leading venture capital funds, healthcare-dedicated funds, other institutional investors, and strategic

investors to advance our technology platforms and therapeutic pipeline. Our institutional investors include Adage Capital Partners, Anterra F&A Ventures, Avego Bioscience Capital, Avidity Partners, Invus, a fund affiliated with Farallon Capital Management, F-Prime Capital Partners Healthcare Fund IV LP, Heritage Medical Systems, Janus Henderson Investors, LifeSci Venture Partners, Maverick funds, Mission Bay Capital, Monashee Investment Management, funds affiliated with PFM Health Sciences, Point72, Ridgeback Capital Investments, Pontifax Global Food and Agriculture Technology Fund, and funds managed by Tekla Capital Management. Our corporate and strategic investors include AbbVie, DuPont, Genus, The Leukemia & Lymphoma Society Therapy Acceleration Program, and Novartis. Additionally, since our founding, we have received approximately $161.1 million from various licensing, collaboration, patent assignment, and service agreements as well as government grants, including approximately $88.4 million in net proceeds from the sale of Intellia Therapeutics, Inc., or Intellia, common stock received as consideration for our CRISPR-Cas9 license agreement with Intellia, and $30.0 million received from AbbVie as an upfront payment for our collaboration and license agreement with AbbVie. Thus, to date, we have received a total of approximately $311.2 million in net proceeds from equity financings and contract revenues.

Intellectual Property

Since our founding in 2011, we have invented and acquired intellectual property covering chRDNA genome editing as well as additional genome-editing and cell therapy technologies. As of the date of this prospectus, we own 48 issued U.S. patents, including 7 U.S. patents covering our chRDNA technology; 209 issued foreign patents; and 93 pending patent applications throughout the world. Our portfolio includes granted U.S. patents covering methods and compositions relating to the anti-BCMA binding domain of our CB-011 product candidate. We have exclusively in-licensed intellectual property covering the anti-CD371 binding domains of our CB-012 product candidate from Memorial Sloan Kettering Cancer Center, or MSKCC. Additionally, we have extensive patent protection on CRISPR Type I systems, CRISPR-Cas9 methods and compositions, and other genome-editing technologies. Without any patent term extension, the earliest expiration dates of our granted U.S. patents are in 2032 and the latest expiration dates of our granted U.S. patents are in 2040. We also rely on trade secrets to protect aspects of our manufacturing that are not amenable to patent protection or infringement detection.

Under an exclusive license agreement with The Regents of the University of California, or UC, and the University of Vienna, or Vienna, we have a worldwide license, with the right to sublicense, in all fields to the foundational CRISPR-Cas9 patent family co-owned by UC, Vienna, and Dr. Emmanuelle Charpentier, or the CVC IP. To date, we have entered into over 20 sublicensing agreements with third parties under which we have granted rights to the CVC IP and other Cas9 intellectual property owned or controlled by us in a variety of fields such as human therapeutics, agriculture, research reagents, transgenic animals, certain livestock targets, internal research, bioproduction, cell lines, microbial applications, and forestry.

Manufacturing

We have built an efficient and scalable manufacturing process, and our process development organization works with several selected contract manufacturing organizations, or CMOs. Our allogeneic CAR-T cell approach utilizes healthy donor T cells, which we believe provides an enhanced and more cost-effective manufacturing process compared to autologous CAR-T cell manufacturing. In addition, we have optimized the process to achieve a high level of cell recovery and activity through enhanced culture conditions, timing, early stage of differentiation, and use of qualified materials. We have developed analytical methods to ensure high integrity of the CAR-T cells based upon our manufacturing process and quality controls. Furthermore, we will be initiating process development to manufacture iPSCs (adult somatic cells genetically reprogrammed to a stem cell-like state) that will enable us to develop genome-edited, iPSC-derived CAR-NK cell therapeutics for targeting solid tumors.

We rely on CMOs for the manufacture of our product candidates for clinical use, and most of these CMOs have demonstrated capability in preparation of materials for commercialization. We conduct our own process development internally prior to transferring our methodologies to the CMO that manufactures our cGMP cell products. We may build our own manufacturing facility in the future to provide us greater flexibility and control over our clinical and/or commercial manufacturing needs.

Our Strategy

Our purpose is to develop transformative genome editing-based therapies for devastating human diseases. Our goal is to build an integrated company that discovers, develops, manufactures, and commercializes genome editing-based therapies that hold the potential to significantly impact a wide range of diseases.

Key components of our strategy include:

- *Applying our chRDNA platform to the clinically evaluated cell-surface targets CD19 and BCMA to develop allogeneic CAR-T cell therapies with improved persistence of antitumor activity.*
- *Developing additional allogeneic CAR-T cell product candidates for the treatment of hematologic malignancies.*
- *Expanding our cell therapy pipeline to include cell therapies for the treatment of solid tumors and metastases by leveraging our iNK cell therapy platform.*
- *Reinforcing our leadership in CRISPR genome editing through strategic investments in our platform and new technologies.*
- *Further expanding patient access to our cell therapies via selective strategic collaborations, such as our collaboration with AbbVie.*
- *Pursuing indications both within and outside of oncology on our own and through selective strategic collaborations.*

Summary of Risk Factors

Our business is subject to a number of risks of which you should be aware before making a decision to invest in our common stock. These risks are more fully described in the section titled “Risk Factors” immediately following this prospectus summary. These risks include, among others, the following:

- We have incurred significant net operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.
- Even if this offering is successful, we will need substantial additional financing to develop our product candidates and implement our operating plans. If we fail to obtain additional financing, we may be delayed or unable to complete the development and commercialization of our product candidates.
- We have a limited operating history, which may make it difficult to evaluate our technologies and product candidate development capabilities or to predict our future performance.
- We are early in our development efforts and it will be many years before we commercialize a product candidate, if ever. If we are unable to advance our product candidates through clinical trials, obtain regulatory approval, and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.

- Our product candidates are cell therapies generated by novel chRDNA genome-editing technologies, which makes it difficult to predict the time and cost of developing our product candidates and obtaining regulatory approval. To date, no other products that use these genome-editing technologies have advanced into clinical trials or received marketing approval in the United States.
- Our business is highly dependent on the success of our lead product candidates, including CB-010 and CB-011, which will require significant additional preclinical and clinical testing before we can seek regulatory approval and potentially commercially launch our product candidates. If we are unable to advance our preclinical studies and clinical trials, obtain approval for, and successfully commercialize, our lead product candidates for the treatment of patients in approved indications or if we are significantly delayed in doing so, our business would be significantly harmed.
- If we experience delays or difficulties enrolling patients in the clinical trials for our product candidates, including our ANTLER phase 1 clinical trial, our ability to advance CB-010 and our other product candidates through clinical development and the regulatory process could be delayed or prevented.
- Our clinical trials may fail to demonstrate adequately the safety and efficacy of any of our product candidates and the development of our product candidates may be delayed or unsuccessful, which could prevent or delay regulatory approval and commercialization.
- If our product candidates cause serious adverse events or undesirable side effects, including injury and death, or have other properties that could delay or prevent regulatory approval, their commercial potential may be limited or extinguished.
- We face significant competition from other biotechnology and pharmaceutical companies, which may result in other companies developing or commercializing products before, or more successfully than, we do, thus rendering our product candidates non-competitive or reducing the size of our market, and our operating results will suffer if we fail to compete effectively.
- If we do not possess intellectual property rights covering our proprietary chRDNA genome-editing technology and product candidates, we may not be able to block competitors or to compete effectively in our markets.
- Third-party claims of intellectual property infringement may prevent or delay our ability to commercialize our product candidates.
- Our rights to develop and commercialize our product candidates are subject to the terms and conditions of licenses and assignments with third parties, and if we fail to comply with our obligations under these agreements, we could lose these intellectual property rights and be subject to litigation from our licensors or assignors.
- Our ability to continue to receive licensing revenues and to enter into new licensing arrangements will be substantially impaired if the CVC IP is limited by administrative patent proceedings.
- We rely on third parties to supply the materials for, and the manufacturing of, our clinical supplies, and we may continue our reliance on third parties for manufacturing of our commercial products, if approved.
- We may not be able to meet our obligations under the AbbVie collaboration or our own product candidates and pipeline may be delayed in light of our obligations to AbbVie. In addition, we have limited control over the achievement of milestones by AbbVie.

- Our future success depends on our ability to retain key executive officers and to attract, retain, and motivate qualified personnel.
- We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

Corporate and Other Information

We were founded in October 2011 as a Delaware corporation. Our principal executive offices are located at 2929 7th Street, Suite 105, Berkeley, California 94710 and our telephone number is (510) 982-6030.

Our website address is *www.cariboubio.com*. The information on, or that can be accessed through, our website is not part of this prospectus and is not incorporated by reference herein. We have included our website address as an inactive textual reference only.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. We will remain an emerging growth company until the earliest of: (i) the last day of the fiscal year following the fifth anniversary of the consummation of this offering; (ii) the last day of the fiscal year in which we have total annual gross revenue of at least $1.07 billion; (iii) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which would occur if the market value of our common stock held by nonaffiliates exceeded $700 million as of the last business day of the second fiscal quarter of such year; or (iv) the date on which we have issued more than $1 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company:

- we will present in this prospectus only two years of audited annual financial statements, plus any required unaudited financial statements, and related management's discussion and analysis of financial condition and results of operations;
- we will avail ourselves of the exemption from the requirement to obtain an attestation and report from our independent registered public accounting firm on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act;
- we will provide less extensive disclosure about our executive compensation arrangements; and
- we will not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period for any other new or revised accounting standards during the period in which we remain an emerging growth company; however, we may adopt certain new or revised accounting standards early.

We may also qualify as a "smaller reporting company" if the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700 million and our annual revenue is less than $100 million during our most recently completed fiscal year. If we

qualify as a smaller reporting company, we may continue to be a smaller reporting company after this offering if either (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue is less than $100 million during the most recently completed fiscal year and the market value of our stock held by nonaffiliates is less than $700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, if we are a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

THE OFFERING

Issuer	Caribou Biosciences, Inc.
Common stock offered by us	shares
Option to purchase additional shares	We have granted the underwriters an option exercisable for a period of 30 days to purchase up to additional shares of our common stock.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares of common stock in full). The underwriters can exercise this option at any time within 30 days after the date of this prospectus.
Use of proceeds	We estimate that the net proceeds to us from the sale of shares of common stock in this offering will be approximately $ million (or approximately $ million if the underwriters exercise their option to purchase additional shares in full), based upon an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to advance the clinical development of our CB-010 product candidate, including funding the ANTLER phase 1 clinical trial through initial data; to fund IND-enabling activities and the potential initiation of clinical studies for our CB-011 and CB-012 product candidates; to continue research and development of our iPSC-to-NK platform for solid tumor-targeted cell therapies; to continue advancement of our genome-editing technologies, as well as discovery-stage research toward potential additional programs; and the remainder for working capital and other general corporate purposes. See the section titled “Use of Proceeds” for more information.
Risk factors	See the section titled “Risk Factors” and the other information included in this prospectus for a discussion of risks you should carefully consider before investing in our common stock.
Proposed Nasdaq Global Select Market trading symbol	“CRBU”

The number of shares of common stock to be outstanding following this offering is based on 20,155,504 shares of common stock outstanding as of May 31, 2021 (after giving effect to the conversion of all of our shares of preferred stock outstanding as of May 31, 2021, into an aggregate of 14,430,522 shares of our common stock immediately prior to the completion of this offering), and excludes:

- 2,838,275 shares of common stock issuable upon the exercise of stock options outstanding as of May 31, 2021, under our 2013 Equity Incentive Plan, or the 2013 Plan, at a weighted average exercise price of $5.16 per share;
- 250,000 shares of common stock issuable upon the exercise of stock options outstanding as of May 31, 2021, under our 2012 Stock Option/Stock Issuance Plan, or the 2012 Plan, at a weighted average exercise price of $0.10 per share;
- 804,702 shares of common stock available for future issuance under the 2013 Plan as of May 31, 2021;
- shares of common stock reserved for future issuance under our 2021 Equity Incentive Plan, or the 2021 Plan, which will become effective in connection with this offering; and
- shares of common stock reserved for future issuance under our 2021 Employee Stock Purchase Plan, or the 2021 ESPP, which will become effective in connection with this offering.

Unless we specifically state otherwise, all information in this prospectus assumes:

- a -for- stock split of our common stock to be effective on , 2021;
- the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 14,430,522 shares of common stock immediately prior to the closing of this offering;
- no exercise of the outstanding options described above;
- no exercise of the underwriters' option to purchase up to additional shares of our common stock; and
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws upon the closing of this offering.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables summarize our consolidated financial data for the periods and as of the dates indicated. We have derived the summary consolidated statements of operations and comprehensive loss data for the years ended December 31, 2019 and 2020 and consolidated balance sheet data as of December 31, 2020 from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the summary condensed consolidated statements of operations and comprehensive loss data for the three months ended March 31, 2020 and 2021 and condensed consolidated balance sheet data as of March 31, 2021 from our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus. In the opinion of management, such unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of such financial data. Our historical results are not necessarily indicative of the results that may be expected in the future and our interim results are not necessarily indicative of our expected results for the year ending December 31, 2021 or any other interim period. The summary financial data included in this section is not intended to replace the financial statements and related notes included elsewhere in this prospectus. You should read this data together with our consolidated financial statements and related notes appearing elsewhere in this prospectus and the information in the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Years Ended December 31,		Three Months Ended March 31,	
	2019	2020	2020	2021
	(In thousands, except share and per share amounts)			
Consolidated Statements of Operations and Comprehensive Loss Data:				
Licensing and collaboration revenue	$ 5,788	$ 12,361	$ 1,701	$ 1,586
Operating expenses:				
Research and development	23,635	34,425	8,641	10,165
General and administrative	16,458	14,060	3,489	4,596
Total operating expenses	40,093	48,485	12,130	14,761
Loss from operations	(34,305)	(36,124)	(10,429)	(13,175)
Other income (expense):				
Interest income	1,047	236	142	4
Interest expense	(4)	(20)	(3)	(5)
Change in fair value of equity securities	2,294	(733)	(733)	—
Other income	—	514	21	17
Total other income (expense)	3,337	(3)	(573)	16
Net loss before provision for income taxes	(30,968)	(36,127)	(11,002)	(13,159)
Benefit from income taxes	(7,537)	(1,819)	(1,202)	—
Net loss and comprehensive loss	$ (23,431)	$ (34,308)	$ (9,800)	$ (13,159)
Net loss per share, basic and diluted(1)	$ (5.09)	$ (7.30)	$ (2.11)	$ (2.52)
Weighted-average shares used in computing net loss per share, basic and diluted(1)	4,606,536	4,701,183	4,636,644	5,225,226
Pro forma net loss per share, basic and diluted (unaudited)(2)		$ (2.75)		$ (0.86)
Weighted-average shares outstanding used in computing pro forma net loss per share, basic and diluted (unaudited)(2):		12,467,765		15,213,121

(1) See Note 15, “Net loss per share” to each of our consolidated financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per share, and the weighted-average number of shares outstanding used in the computation of the per share amounts.

(2) See the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Unaudited Pro Forma Information” for an explanation of the calculations of our basic and diluted pro forma net loss per share, and the weighted-average number of shares outstanding used in the computation of the per share amounts.

	As of March 31, 2021		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)
	(In thousands, except share and per share amounts)		
Consolidated Balance Sheets Data:			
Cash and cash equivalents	$145,924	$145,924	
Working capital(3)	133,715	133,715	
Total assets	167,965	167,965	
Total liabilities	53,504	53,504	
Convertible preferred stock	150,150	—	
Accumulated deficit	(44,030)	(44,030)	
Total stockholders’ equity (deficit)	(35,689)	114,461	

(1) The pro forma consolidated balance sheet data gives effect to: (i) the filing and effectiveness of our amended and restated certificate of incorporation, which will be in effect immediately prior to the completion of this offering, and (ii) the automatic conversion of all of our outstanding convertible preferred stock into an aggregate of 14,430,522 shares of our common stock immediately prior to the completion of the offering.

(2) The pro forma as adjusted consolidated balance sheet data gives effect to: (i) the pro forma adjustments set forth in footnote (1) above; and (ii) the sale of shares of our common stock in this offering at the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted consolidated balance sheet data discussed above is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, each of our pro forma as adjusted cash and cash equivalents, working capital, total assets, and total stockholders’ equity (deficit) by approximately $ million, assuming the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1,000,000 shares of common stock offered by us would increase or decrease, as applicable, each of our pro forma as adjusted cash and cash equivalents, working capital, total assets, and total stockholders’ equity (deficit) by approximately $ million, assuming the assumed initial public offering price of $ per share remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing.

(3) We define working capital as current assets less current liabilities. See our consolidated financial statements and related notes appearing elsewhere in this prospectus for details regarding our current assets and current liabilities.

RISK FACTORS

Investing in shares of our common stock involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all of the other information contained in this prospectus, including our financial statements and related notes, before making an investment decision. The risks described below are not the only ones facing us. Many of the following risks and uncertainties are, and will be, exacerbated by the COVID-19 pandemic and any worsening of the global business and economic environment as a result. The occurrence of any of the following risks, or of additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, could materially and adversely affect our business, financial condition, results of operations and prospects, and reputation. In such case, the trading price of shares of our common stock could decline, and you may lose all or part of your investment. This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described below. See "Special Note Regarding Forward-Looking Statements."

Risks Relating to Our Financial Position and Need for Additional Capital

We have incurred significant net operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.

We have incurred significant net operating losses each year since our inception. For the years ended December 31, 2019 and 2020, we incurred net operating losses of $34.3 million and $36.1 million, respectively, and for the three months ended March 31, 2020 and 2021, we incurred net operating losses of $9.8 million and $13.2 million, respectively. As of March 31, 2021, we had an accumulated deficit of $44.0 million. In addition, we have not commercialized any products and have never generated any revenue from product sales. We have devoted almost all of our financial resources to research and development, including our preclinical development activities.

We expect to continue to incur significant expenses and operating losses over the next several years and for the foreseeable future as we seek to advance product candidates through preclinical and clinical development, expand our research and development activities, develop new product candidates, complete preclinical studies and clinical trials, seek regulatory approval and, if we receive approval from the U.S. Food and Drug Administration, or FDA, or foreign regulatory authorities, commercialize our products. Furthermore, the costs of advancing product candidates into each succeeding clinical phase tend to increase substantially over time. The total costs to advance any of our product candidates to marketing approval in even a single jurisdiction is substantial. Our prior losses, combined with expected future losses, will continue to have an adverse effect on our stockholders' deficit and working capital. We anticipate that our expenses will increase substantially if and as we:

- progress our ANTLER phase 1 clinical trial for our CB-010 product candidate;
- continue our current research programs and our preclinical and clinical development of our other current product candidates, including CB-011, CB-012, and CB-020, and any other product candidates we identify and choose to develop;
- hire additional clinical, quality control, and scientific personnel;
- seek to identify additional research programs and additional product candidates;
- further develop our genome-editing technologies;
- acquire or in-license technologies;
- expand, maintain, enforce, and defend our intellectual property estate;

- seek regulatory and marketing approvals for any of our product candidates that successfully complete clinical trials, if any;
- establish and expand manufacturing capabilities and supply chain capacity for our product candidates;
- add operational, legal, financial, and management information systems and personnel;
- experience any delays, challenges or other issues associated with any of the above, including the failure of clinical trials meeting endpoints, the generation of unanticipated preclinical results or clinical trial data subject to differing interpretations, or the occurrence of potential safety issues or other development or regulatory challenges;
- make royalty, milestone, or other payments under current, and any future, in-license or assignment agreements;
- establish a sales, marketing, and distribution infrastructure to commercialize any product candidates for which we obtain marketing approval; and
- operate as a public company.

Because of these risks, we are unable to predict the extent of any future losses or when we will become profitable, if at all. Even if we do become profitable, we may not be able to sustain or increase our profitability on a quarterly or annual basis.

Even if this offering is successful, we will need substantial additional financing to develop our product candidates and implement our operating plans. If we fail to obtain additional financing, we may be delayed or unable to complete the development and commercialization of our product candidates.

Even after the consummation of this offering, we will continue to need additional capital beyond the proceeds of this offering, which we may raise through equity offerings, debt financings, collaborations and strategic alliances, licensing arrangements, or other sources. Additional sources of financing might not be available on favorable terms, if at all. If we do not succeed in raising additional funds on acceptable terms, we might be unable to complete the development or obtain marketing approval of any of our product candidates, and we could be forced to delay or discontinue product development and commercialization.

We expect to spend a substantial amount of capital in the research, development, and manufacture of our product candidates. We expect our expenses to increase in connection with our ongoing activities, particularly as we initiate clinical trials for, and seek marketing approval of, our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing, and distribution to the extent that we do not obtain commercialization partners who will bear the costs for such activities. We may also need to raise additional funds sooner if we choose to pursue additional indications or markets for our product candidates or otherwise expand more rapidly than we presently anticipate. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we will be forced to delay, reduce, or eliminate certain of our research and development programs or future commercialization efforts. Because our allogeneic cell therapy product candidates are based on new technologies, they require extensive research and development and have substantial manufacturing costs. In addition, clinical costs to treat cancer patients with our product candidates, including treatment of any potential side effects that may arise, will be significant.

As of December 31, 2020 and March 31, 2021, we had cash and cash equivalents of $16.0 million and $145.9 million, respectively. In March 2021, we received a $30.0 million upfront cash payment under our Collaboration and License Agreement with AbbVie Manufacturing Management Unlimited Company, or AbbVie, and we received net proceeds of $108.8 million from our Series C convertible preferred stock financing. We expect our cash and cash equivalents to be sufficient to fund our current operating plan through at least the next 12 months from the date the interim condensed consolidated financial statements included elsewhere in this prospectus are issued. Our expectation is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

Our future capital requirements will depend on, and could increase significantly as a result of, many factors, including:

- costs, progress, and results of our product candidate preclinical studies and clinical trials;
- potential delays in our preclinical studies and clinical trials, whether current or planned, due to unforeseen events as well as other factors such as the COVID-19 pandemic;
- costs and prioritization of our research and development programs as well as costs to acquire or in-license technologies or other product candidates;
- expansion of our workforce or our facilities;
- costs of establishing and maintaining a supply chain for the development and manufacture of our product candidates;
- timing and outcome of regulatory review of our product candidates;
- success of our collaboration with AbbVie and our receipt of reimbursements due thereunder;
- our ability to establish and maintain additional collaborations on favorable terms;
- costs of fulfilling our contractual obligations to reimburse certain parties for costs incurred in connection with the prosecution and maintenance of licensed patent rights, including reimbursements owed to The Regents of the University of California, or UC;
- achievement of milestones that trigger payments under any of our current license and assignment agreements as well as under any additional agreements we enter into in the future;
- costs of preparing, filing, prosecuting, and maintaining our patent portfolio, including costs associated with administrative proceedings of patent offices;
- litigation costs in the event we seek to enforce our patents against third parties or if we are sued for infringement by third parties;
- effects of competing technologies, success or failure of products similar to our product candidates, and market developments;
- costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory approvals to market our product candidates; and
- costs of operating as a public company.

Changing circumstances may cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more money than expected because of circumstances beyond our control. We may also need to raise additional capital sooner if we choose to expand programs, personnel, and facilities more rapidly than planned. In any event, we will require additional capital for the further research, development, and commercialization of our product candidates, including potentially establishing our own internal manufacturing capabilities. Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to research, develop, and commercialize our product candidates.

We cannot be certain that additional funding will be available when needed and on acceptable terms, or at all. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay, or discontinue one or more of our product candidate preclinical studies, clinical trials, or development and commercialization, or we may be unable to expand our operations or otherwise capitalize on our business opportunities, as desired. Any of the above could significantly harm our business, financial condition, results of operations, and prospects and cause the price of our common stock to decline.

Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering; restrict our operations; or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, that we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, and strategic collaboration and licensing arrangements. The terms of any financing may adversely affect the holdings or the rights of our stockholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our common stock to decline. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, licensing or assigning our intellectual property rights, declaring dividends, and possibly other restrictions.

To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders' interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders.

If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce, or terminate our product development or future commercialization efforts. Alternatively, we could be required to seek collaborators for our product candidates at an earlier stage than would otherwise be desirable or on terms that are less favorable than might otherwise be available. We might need to relinquish or license on unfavorable terms our rights to our product candidates in markets where we otherwise would seek to pursue development and commercialization ourselves, or to license our intellectual property to others who could develop products that will compete with our products. Any of these actions could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We have a limited operating history, which may make it difficult to evaluate our technologies and product candidate development capabilities or to predict our future performance.

We are a clinical-stage biotechnology company formed in 2011, with no products approved for commercial sale, and we have not generated any revenues from product sales. Our operations to date have been limited to financing and staffing our company, developing our technologies, and identifying and developing our product candidates. Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in their early stages of operations. We have not yet demonstrated an ability to obtain marketing approval, manufacture at commercial scale, or conduct sales and marketing activities for our product candidates, which are all necessary for successful product commercialization. Consequently, predictions about our future success or viability may not be as accurate as they could be if we had a longer operating history or

a history of successfully developing and commercializing cell therapy products. Our ability to generate product revenue or profits, which we do not expect to occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates, which may never occur. Unless we receive approval from the FDA or other regulatory authorities for our product candidates, we will not have product revenues. We may never be able to develop or commercialize a marketable cell therapy product.

We are early in our development efforts. To date, we have only dosed the first patient in our first clinical trial, which is the ANTLER phase 1 clinical trial for our CB-010 product candidate. All of our programs will require clinical development, regulatory approval, manufacturing at commercial scale, distribution channels, a commercial organization, significant marketing efforts, and substantial investment before we generate any revenue from product sales. In addition, our product candidates must be approved for marketing by the FDA before we may commercialize our products in the United States and, if we wish to commercialize our products outside the United States, by foreign regulatory agencies. Furthermore, following closing of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, accounting, insurance, investor relations, and other expenses that we did not incur as a private company.

Additionally, the rapidly evolving nature of the genome-editing and cell therapy fields may make it difficult to evaluate our technologies and product candidates as well as to predict our future performance. Our short history as an operating company makes any assessment of our future success or viability subject to significant uncertainty. We will encounter risks and difficulties, known and unknown, that are frequently experienced by early-stage companies in rapidly evolving fields. As we advance our product candidates, we must transition from a company with a research focus to a company capable of supporting clinical development and, if successful, commercial activities. We may not be successful in such transitions. If we do not address these risks successfully, our business will suffer. Similarly, we expect that our financial condition and operating results may fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. As a result, you should not rely upon the results of any quarterly or annual period as an indicator of future operating performance.

Risks Relating to Our Business, Government Regulation, Technology, and Industry

We are early in our development efforts and it will be many years before we commercialize a product candidate, if ever. If we are unable to advance our product candidates through clinical trials, obtain regulatory approval, and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.

We are early in the development of our cell therapy product candidates and have focused our research and development efforts to date on various CRISPR genome-editing technologies, including our chRDNA genome-editing technology, as well as identifying our initial chimeric antigen receptor T cell, or CAR-T cell, product candidates. Our future success depends heavily on the successful development of our product candidates. Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will be a result of the successful development and eventual commercialization of our product candidates, which may never occur. Our product candidates may have adverse side effects or fail to demonstrate safety and efficacy. Additionally, our product candidates may have other characteristics that may make them impractical or prohibitively expensive for large-scale manufacturing. Furthermore, our product candidates may not receive regulatory approval or, if they do, they may not be accepted by the medical community or patients or may not be competitive with other products that become available. We currently generate no revenue from sales of any product and we may never be able to successfully develop or commercialize a marketable product.

We must submit investigational new drug, or IND, applications to the FDA to initiate clinical trials in the United States. In late August 2020, the FDA cleared our IND for our first product candidate, CB-010. The filing of future INDs for our other product candidates is subject to additional preclinical research, research-scale and clinical-scale manufacturing, exploration of possible other genome-editing systems, evaluation of potential targets, or other factors yet to be identified. In the case of our CB-012 product, we will need to identify and select

our Cas12a chRDNA guides with acceptable accuracy and efficiency. In addition, commencing any new clinical trial is subject to review by the FDA based on the acceptability and sufficiency of our chemistry, manufacturing, and controls, or CMC, and preclinical information provided to support our IND. In the event that the FDA or foreign regulatory authorities require us to complete additional preclinical studies or we are required to satisfy other requests for additional data or information, our clinical trials may be delayed. Even after we receive and incorporate guidance from the FDA or foreign regulatory authorities, these regulatory authorities could disagree that we have satisfied all requirements to initiate our clinical trial or they may change their position on the acceptability of our trial design or the clinical endpoints selected. They could impose a clinical hold, which may require us to complete additional preclinical studies or clinical trials. The success of our product candidates will depend on several factors, including the following:

- sufficiency of our financial and other resources;
- acceptance of our chRDNA genome-editing technology;
- ability to develop and deploy armoring technologies so that our product candidates have a competitive edge;
- completion of preclinical studies;
- clearance of INDs to initiate clinical trials;
- successful enrollment in, and completion of, our clinical studies;
- data from our clinical trials that support an acceptable risk-benefit profile of our product candidates for our intended patient populations and indications and demonstrate safety and efficacy;
- establishment of agreements with third-party contract manufacturing organizations, or CMOs, for clinical and commercial supplies and scaling up of manufacturing processes and capabilities to support our clinical trials;
- successful development of our internal process development and transfer to larger-scale facilities;
- receipt of regulatory and marketing approvals from applicable regulatory authorities;
- receiving regulatory exclusivity for our product candidates;
- establishment, maintenance, enforcement, and defense of patent and trade secret protection and other intellectual property rights;
- not infringing, misappropriating, or otherwise violating third-party intellectual property rights;
- entry into collaborations to further the development of our product candidates or for the development of new product candidates;
- establishing sales, marketing, and distribution capabilities for commercial launch of our product candidates if and when approved, whether by us or in collaboration with third parties;
- maintenance of a continued acceptable safety profile of products post-approval;
- acceptance of product candidates, if and when approved, by patients, the medical community, and third-party payors;

- effective competition with other therapies and treatment options;
- establishment and maintenance of healthcare coverage and adequate reimbursement; and
- expanding indications and patient populations for our products post-approval.

Our product candidates are cell therapies generated by novel chRDNA genome-editing technologies, which makes it difficult to predict the time and cost of developing our product candidates and obtaining regulatory approval. To date, no other products that use these genome-editing technologies have advanced into clinical trials or received marketing approval in the United States.

We are concentrating our initial research, development, and manufacturing efforts on our allogeneic CAR-T cell therapies that are intended to treat patients with certain cancers. Before obtaining regulatory approval for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex, and expensive preclinical studies and clinical trials that our product candidates are both safe and effective for their intended use. The clinical trial requirements of the FDA and other regulatory authorities, and the criteria these regulators use to determine the safety and efficacy of a product candidate, vary substantially according to the type, complexity, novelty, intended use, and target population of our product candidates. The outcome of preclinical studies and clinical trials is inherently uncertain. Failure can occur at any time during the preclinical study and clinical trial processes and because we have never successfully launched a product and our first product candidate is in an early stage of clinical development, there is a high risk of failure. We may never succeed in developing marketable products.

Approval processes by the FDA or other regulatory authorities for existing autologous anti-CD19 and anti-B cell maturation antigen, or BCMA, CAR-T cell therapies may not be indicative of what these regulatory authorities will require for approval of our allogeneic anti-CD19 CAR-T cell therapy or our other product candidates. Also, although we expect reduced variability in our allogeneic products candidates compared to autologous products, we do not have any clinical data supporting benefits of lower variability, and the use of healthy donor material may create separate variability challenges for us. Moreover, our product candidates may not perform successfully in clinical trials or may be associated with serious adverse events that distinguish them from the autologous anti-CD19 and anti-BCMA CAR-T therapies that have previously been approved. For instance, allogeneic product candidates may result in graft versus host disease, or GvHD, not experienced with autologous products. GvHD results when allogeneic T cells see the patient's normal tissue as foreign and attack and damage those cells. Even if we collect promising initial clinical data for our product candidates, longer-term data may reveal adverse events or responses that are not durable. Unexpected negative clinical outcomes would significantly impact our business.

In addition, approved autologous CAR-T therapies and those under development have shown frequent rates of cytokine release syndrome, neurotoxicity, serious infections, prolonged cytopenia, and hypogammaglobulinemia, and other serious adverse events that have resulted in patient deaths. There may be similar adverse events for our allogeneic CAR-T and CAR-NK cell therapy product candidates, including patient deaths. Moreover, patients eligible for allogeneic CAR-T cell therapies but ineligible for autologous CAR-T cell therapies due to aggressive cancer or an inability to wait for autologous CAR-T cell therapies may be at greater risk for complications and death from therapy. Our allogeneic CAR-T cell product candidates may also cause unique adverse events related to the differences between the donor and patients, such as GvHD or infusion reactions. Our product candidates may not be successful in limiting the risk of GvHD, exhaustion of the CAR-T cells, or premature rejection by the patient's immune system. If significant GvHD or other serious adverse events are observed with the administration of our product candidates, or if any of our product candidates are viewed as less safe or effective than autologous therapies or other allogeneic therapies, our ability to develop other allogeneic therapies may be adversely affected.

We use our chRDNA genome-editing platform to generate our product candidates, and we believe chRDNAs significantly improve the specificity of CRISPR genome editing (*e.g.*, reduce the number of off-target

events). CRISPR genome editing generally is relatively new; to date, no genome-editing technologies have been approved in the United States although clinical trials of product candidates based on CRISPR and other genome-editing technologies are underway. As a result, the regulatory approval process for cell therapy product candidates such as ours is uncertain and may be more expensive and take longer than the approval process for product candidates based on better known or more extensively studied technologies. As such, it is difficult to accurately predict the developmental challenges we may face as we progress our product candidates through preclinical studies and clinical trials. There may be long-term adverse effects from treatment with our product candidates resulting from the use of our chRDNA genome-editing technology that we cannot predict at this time. Also, animal models may not exist for some of the diseases we choose to pursue in our programs, which may complicate and increase the cost of preclinical research. As a result of these factors, it is difficult for us to predict the time and cost of our product candidate development, and we cannot predict whether the application of our chRDNA genome-editing technology, or other genome-editing technologies we may use in the future, will result in the identification, development, preclinical studies, and clinical trials to support regulatory approval of any of our cell therapy product candidates. There can be no assurance that any development problems we experience in the future related to our chRDNA genome-editing technology or any of our research programs will not cause significant delays or unanticipated costs, or that such development problems can be solved. We may not achieve the desired safety and efficacy of our product candidates. Also, we may not sufficiently improve genome-editing specificity and our genome editing may have off-target events. Moreover, we may not be able to achieve a high degree of on-target gene knockout and insertion efficiency in developing our product candidates. While we expect to have initial clinical data from the CB-010 clinical trial in 2022, any of these factors may prevent us from completing our clinical trials, delay or cause us to fail to meet our clinical trial endpoints, or lead us to fail to commercialize any of our cell therapy product candidates.

We may also experience delays in developing robust, reproducible, and scalable manufacturing processes and transferring those processes to CMOs, which may prevent us from completing our clinical studies or commercializing our products on a timely or profitable basis, if at all. Currently, we have only manufactured our CB-010 product candidate for clinical trials. In addition, since we are in the early stages of clinical development, we do not know the doses to be used in later phase 2 or pivotal trials needed to evaluate the efficacy of our product candidates, which will impact the manufacturing requirements for our product candidates. Finding a suitable dose for our cell therapy product candidates may delay our anticipated clinical development timelines and prolong our clinical trials. Accordingly, our expectations with regard to our costs of manufacturing may vary significantly as we develop our product candidates and understand these critical factors. Such factors may delay or keep us from bringing a product candidate to market and could decrease our ability to generate sufficient product revenue, which could harm our business, financial condition, results of operations, and prospects.

Manufacturing of our product candidates is complex and we could experience manufacturing problems during our clinical trials, which could delay or limit our market launch or commercial distribution.

The manufacturing processes used to produce our cell therapy product candidates are and will be complex, as our product candidates are novel products and only our CB-010 product candidate has been manufactured according to current good manufacturing processes, or cGMPs, to date. Several factors could cause production interruptions including facility contaminations; shortages or quality problems; contamination of healthy donor cells, chRDNA guides, Cas proteins, viruses, or induced pluripotent stem cell, or iPSC, master cell banks or working cell banks; natural disasters, including the COVID-19 pandemic; labor shortages and strikes; lack of experienced scientific, quality control, and manufacturing personnel; human error; or other disruptions in the operations of our suppliers and CMOs. We conduct process development activities at our facility and we may experience personnel and supply shortages. Problems with our manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims, or insufficient inventory. We may encounter problems achieving adequate quantities and quality of clinical grade materials that meet FDA or other applicable standards or specifications with consistent and acceptable production yields and costs.

As our product candidates proceed through preclinical studies to clinical trials to regulatory review, and potential marketing approval and commercialization, it is common that various aspects of our manufacturing methods will be altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives. If we make any of these changes, they could cause our product candidates to perform differently and affect the results of clinical trials conducted with the altered materials. Such changes may also require additional testing as well as notification to or approval from the FDA or other regulatory authorities, which could delay completion of our clinical trials, require bridging clinical trials, require repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates, if any, and ultimately jeopardize commercialization.

If we receive marketing approval for a product candidate, the FDA and other regulatory authorities may require us to submit samples of any lot of any approved product together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA or other regulatory authorities may require that we not distribute a lot until the relevant agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. Problems in our manufacturing processes could restrict our ability to meet market demand for our products. All of these factors could be costly to us and otherwise harm our business, financial condition, results of operations, and prospects.

Our business is highly dependent on the success of our lead product candidates, including CB-010 and CB-011, which will require significant additional preclinical and clinical testing before we can seek regulatory approval and potentially commercially launch our product candidates. If we are unable to advance our preclinical studies and clinical trials, obtain approval for and successfully commercialize our lead product candidates for the treatment of patients in approved indications, or if we are significantly delayed in doing so, our business would be significantly harmed.

Our business and future success depends on our ability to advance our product candidates through preclinical studies and clinical trials, obtain regulatory approval for, and successfully commercialize, our product candidates. Because CB-010 is our first allogeneic cell therapy product to be evaluated in the clinic, the failure of our lead product candidate, or the failure of other companies' allogeneic anti-CD19 CAR-T cell therapies, including for reasons due to safety, efficacy, or durability, may impede our ability to develop not only CB-010 but our other CAR-T and CAR-NK product candidates as well, and may significantly influence physicians' and regulatory authorities' opinions with regard to the viability of our entire pipeline of allogeneic cell therapies. In order to submit INDs for our other product candidates, we will need to complete many objectives, such as our preclinical research of product candidates still in discovery and advancement of cGMP conditions for our product candidates. If we are unable to achieve any of these objectives, we may not be able to submit other INDs in a timely manner or at all, which would significantly harm our business. Specifically, in terms of our lead product candidates:

CB-010

CB-010 is our allogeneic anti-CD19 CAR-T cell therapy for the treatment of relapsed or refractory B cell non-Hodgkin lymphoma, or B-NHL. We use our Cas9 chRDNA genome-editing technology to eliminate the T cell receptor from healthy donor T cells to reduce the risk of GvHD and to remove the PD-1 checkpoint from the CAR-T cell surface to reduce exhaustion of the CAR-T cells. We have manufactured CB-010 under cGMP conditions and are enrolling patients for our ANTLER phase 1 clinical trial. We do not know if the preclinical animal results we observed will be borne out in human patients or if CB-010 will ultimately prove to be safe and effective.

CB-011

CB-011 is our allogeneic anti-BCMA CAR-T cell therapy for the treatment of relapsed or refractory multiple myeloma, or MM. We are currently in preclinical animal studies with CB-011, using CB-011 cell

therapy materials which we have produced under current Good Laboratory Practices, or cGLP. We use our Cas12a chRDNA genome-editing technology to eliminate the T cell receptor from healthy donor cells to reduce the risk of GvHD. Additionally, we use our Ca12a chRDNA technology to remove endogenous HLA class I presentation from the CAR-T cells and insert an HLA-E-B2M fusion protein into the *B2M* gene, which we believe immune cloaks the CAR-T cells and blunts T- and NK cell-mediated rejection of the allogeneic CAR-T cells by the patient's immune system, potentially resulting in greater persistence, although we have no clinical evidence for this hypothesis. We anticipate filing our IND for our CB-011 product candidate in 2022; however, there can be no assurances that we will be able to produce CB-011 under cGMP conditions or that we will not experience delays in filing our IND.

CB-012

CB-012 is our allogeneic anti-CD371 CAR-T cell therapy for the treatment of acute myeloid leukemia. We are currently considering various armoring strategies, which will then drive our selection of Cas12a chRDNA guides. We do not anticipate filing our IND for our CB-012 product candidate until 2023; however, there can be no assurances that we will be able to produce CB-012 under cGLP or cGMP conditions or that we will not experience delays in filing our IND.

CB-020

We are conducting preclinical discovery research on natural killer, or NK, cells derived from iPSCs, and whether we can edit such iNK cells for solid tumor-targeted cell therapy development. We have not yet chosen which genome-editing technology we will use to edit the iNK cells nor do we know whether such editing will be successful. To date, we have focused on Cas12a chRDNA editing of iPSCs and on differentiating iPSCs into iNKs. We anticipate selecting a cell-surface target for our CB-020 product candidate in 2022.

Thus, although our product candidates are in various stages of research and development, only our CB-010 product candidate is in a phase 1 clinical trial, and we have substantial hurdles to overcome before any of our product candidates are approved, commercialized, and generate revenues, if at all.

We may not be successful in our efforts to identify and successfully research and develop additional product candidates and may expend our limited resources to pursue particular product candidates or indications while failing to capitalize on other product candidates or indications that may be more profitable or for which there is a greater likelihood of commercial success.

Part of our business strategy involves identifying and developing new cell therapy product candidates. The process by which we identify product candidates may fail to yield successful product candidates for a number of reasons, including:

- we may not be able to assemble sufficient resources to identify or acquire additional product candidates;
- competitors may develop alternative therapies that render new product candidates obsolete or less attractive;
- product candidates we develop or acquire may be covered by third-party intellectual property rights;
- new product candidates may, on further study, be shown to have adverse side effects, toxicities, or other characteristics that indicate that they are unlikely to receive marketing approval or achieve market acceptance;
- new product candidates may not be safe or effective;

- the market for a new product candidate may change so that the continued development of that product candidate is no longer reasonable; and

- we may not be able to produce new product candidates in commercial quantities at an acceptable cost, or at all.

We have limited financial and managerial resources. We are focused initially on allogeneic CAR-T and CAR-NK cell therapies and, as a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to timely capitalize on viable commercial products or profitable market opportunities. Our spending on current and future product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing, or other royalty arrangements when it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

If we experience delays or difficulties enrolling patients in the clinical trials for our product candidates, including our ANTLER phase 1 clinical trial, our ability to advance CB-010 and our other product candidates through clinical development and the regulatory process could be delayed or prevented.

The timely completion of clinical trials depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may encounter delays in enrolling or be unable to enroll a sufficient number of patients to complete any of our clinical trials and, even if patients are enrolled, they may withdraw from our clinical trials before completion. We have dosed the first patient in our ANTLER phase 1 clinical trial for our CB-010 product candidate. For our ANTLER phase 1 clinical trial, we have entered into a contract with a clinical research organization, or CRO, as well as clinical trial agreements with the sites participating in our trial. Patient selection and enrollment may be challenging. Our clinical protocol excludes many non-Hodgkin lymphoma patients from the ANTLER phase 1 clinical trial, including patients previously treated with anti-CD19-targeted therapy or allogeneic stem cell transplantation, patients with active or chronic GvHD requiring therapy, or patients unwilling to follow extended safety monitoring.

Our ANTLER phase 1 clinical trial, as well as any future clinical trials for our other product candidates, will compete for enrollment of patients with other clinical trials for product candidates that are in the same cell therapeutic areas with the same or similar study populations as our product candidates. Our clinical trials will also compete for enrollment of patients with other clinical trials for product candidates based on non-cellular modalities, such as small molecules and antibodies, that are intended for the same or similar study populations as our product candidates. This competition will reduce the number and types of patients available to us because some patients who might opt to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Additionally, since the number of qualified and experienced clinical investigators for therapeutic areas is limited, some of our clinical trial sites may be also conducting clinical trials for some of our competitors, which may reduce the number of patients who are available for our clinical trials at that clinical trial site. Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy, hematopoietic stem cell transplantation, or autologous CAR-T cell therapies, rather than refer patients to our clinical trials. Because our cell therapy product candidates are edited with chRDNA guides, our products may be perceived to have additional or greater safety risks. Patients eligible for allogeneic CAR-T cell therapies but ineligible for autologous CAR-T cell therapies may be difficult to treat due to advanced and aggressive cancers and may fail to experience improved outcomes and be at greater risk for complications and death from our product candidates. If patients are unwilling to participate in our cell therapy trials, the timeline for recruiting patients, conducting clinical trials, and obtaining regulatory approval of any of our product candidates may be delayed.

In addition, the enrollment of patients depends on many factors, including:

- severity or stage of the type of cancer under investigation;
- size of the patient population and process for identifying patients;
- design of the clinical trial protocol;
- availability of eligible prospective patients who are otherwise eligible patients for competitive clinical trials;
- availability and efficacy of approved alternative treatments for the disease under investigation;
- ability to obtain and maintain patient consent;
- risk that enrolled patients will drop out before completion of the trial;
- eligibility and exclusion criteria for the trial in question;
- perceived risks and benefits of our product candidates;
- perceived risks and benefits of genome-editing and cell therapies;
- perceived risks and benefits of participating in a clinical trial;
- efforts by clinical sites and investigators to facilitate timely enrollment in clinical trials;
- patient referral practices of physicians;
- ability to monitor patients adequately during and after treatment;
- proximity and availability of clinical trial sites for prospective patients; and
- business interruptions resulting from the COVID-19 pandemic.

Enrollment delays in our clinical trials may result in increased development costs for any product candidates we may develop, which may cause our stock price to decline and limit our ability to obtain additional financing. If we have difficulty enrolling a sufficient number of patients to conduct our clinical trials as planned, we may need to delay, limit, or terminate our ANTLER phase 1 clinical trial or future clinical trials, and postpone or forgo seeking marketing approval, any of which would have an adverse effect on our business, financial condition, results of operations, and prospects.

Clinical testing is expensive, time consuming, and subject to uncertainty. We cannot guarantee that any clinical studies will be conducted as planned or completed on schedule, if at all. Issues may arise that could suspend or terminate our clinical trials. A failure of one or more clinical studies may occur at any stage of testing, and our future clinical studies may not be successful.

Events that may prevent successful or timely completion of clinical development include:

- the FDA or comparable foreign regulatory authorities disagreeing as to the design or implementation of our clinical trials;

- delays or failure to obtain regulatory clearance to initiate our clinical trials, as well as delays or failures to obtain any necessary approvals by the clinical sites;
- delays, suspension, or termination of our clinical trials by the clinical sites;
- modification of clinical trial protocols;
- delays in reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites, as well as possible future breaches of such agreements;
- failure to manufacture sufficient quantities of our product candidates for use in our clinical trials;
- failure by third-party suppliers, CMOs, CROs, and clinical trial sites to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- imposition of a temporary or permanent clinical hold by us, the investigational review boards, or IRBs, for the institutions at which such trials are being conducted, or by the FDA or other regulatory authorities for safety or other reasons, such as a result of a new safety finding in a clinical trial on a similar product by one of our competitors, that presents unreasonable risk to clinical trial participants;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which we developed our clinical development plan, which may require new or additional trials;
- the cost of clinical trials of our product candidates being greater than we anticipated;
- insufficient funding to continue clinical trials with our product candidates;
- the emergence of unforeseen safety issues or undesirable side effects;
- clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon development of our product candidates;
- inability to establish clinical trial endpoints that applicable regulatory authorities consider clinically meaningful, or, if we seek accelerated approval, that applicable regulatory authorities consider likely to predict clinical benefit;
- regulators withdrawing their approval of a product or imposing restrictions on its distribution; and
- business interruptions resulting from the COVID-19 pandemic.

If we are required to extend the duration of any clinical trials or to conduct additional preclinical studies or clinical trials or other testing of our product candidates beyond those that we currently contemplate; if we are unable to successfully complete preclinical studies or clinical trials of our product candidates or other testing; if the results of these trials, studies, or tests are negative or produce inconclusive results; if there are safety

concerns; or if we determine that the observed safety or efficacy profile would not be competitive in the marketplace, we may:

- abandon the development of one or more product candidates;
- incur unplanned costs;
- be delayed in obtaining marketing approval for our product candidates or not obtain marketing approval at all;
- obtain marketing approval in some jurisdictions and not in others;
- obtain marketing approval for indications or patient populations that are not as broad as intended or designed;
- obtain marketing approval with labeling that includes significant use restrictions or safety warnings, including black box warnings;
- be subject to additional post-marketing requirements; or
- have regulatory agencies remove the product from the market or we voluntarily withdraw the product from the market after obtaining marketing approval.

Our clinical trials may fail to adequately demonstrate the safety and efficacy of any of our product candidates and the development of our product candidates may be delayed or unsuccessful, which could prevent or delay regulatory approval and commercialization.

Our product candidates are in various stages of preclinical and clinical development. If we encounter safety or efficacy problems in our ongoing or future studies, our developmental plans and business could be significantly harmed. Product candidates in later stages of clinical trials may fail to show the desired safety profiles and efficacy results despite having progressed through initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we may decide, or regulatory agencies may require us, to conduct additional clinical trials or preclinical studies. In addition, data obtained from clinical trials are susceptible to varying interpretations, and regulatory agencies may not interpret our data as favorably as we do, which may delay, limit, or prevent regulatory approval.

In addition, the design of a clinical trial can determine whether its results will support approval of our product candidates, and flaws in the design of a clinical trial may not be apparent until the clinical trial is well advanced. We have limited experience designing clinical trials and may be unable to design and execute a clinical trial that will support regulatory approval.

From time to time, we may publish initial, interim, or preliminary data from our clinical trials. Initial, interim, or preliminary data from clinical trials are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. We also make assumptions, estimations, calculations, and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully evaluate all data at the time of publishing initial, interim, or preliminary data. These data also remain subject to audit and verification procedures that may result in the final data being materially different from the data we previously published. As a result, initial, interim, and preliminary data should be viewed with caution until the final data are available. Moreover, initial, interim, and preliminary data are subject to the risk that one or more of the clinical outcomes may materially change as more patient data

become available when patients mature on study, patient enrollment continues, or, for final data, as other ongoing or future clinical trials with a product candidate further develop. Past results of clinical trials may not be predictive of future results. Unfavorable differences between initial, interim, or preliminary data and final data could significantly harm our business prospects and may cause the trading price of our common stock to fluctuate significantly.

Because of these risks, our product candidates may fail or encounter difficulties in clinical trials. If we are unable to advance our product candidates through clinical trials to seek marketing approval, our business, financial condition, results of operations, and prospects may be materially harmed.

If our product candidates cause serious adverse events or undesirable side effects, including injury and death, or have other properties that could delay or prevent regulatory approval, their commercial potential may be limited or extinguished.

Product candidates we develop may be associated with undesirable or unacceptable side effects, unexpected characteristics, or other serious adverse events, including death. Immunotherapy, and its method of action of harnessing the immune system, is powerful and could lead to serious side effects that we only discover in clinical trials. In addition to potential serious adverse events from the immune system or side effects caused by our CB-010 product, or any product candidate we may develop and advance into one more clinical trials, the product candidate administration process and related procedures may also cause undesirable side effects. Patients who enroll in our ANTLER phase 1 clinical trial, and potentially future trials, will undergo a lymphodepletion regimen, including administration of fludarabine and cyclophosphamide, which can lead to serious adverse events. Because these regimens will cause a transient and sometimes prolonged immune suppression, patients will have an increased risk of certain infections, which could ultimately lead to death. We expect to have to educate clinical site personnel administering our cell therapy product candidates to understand the side effect profiles for our product candidates. Inadequate recognition or management of the potential side effects of our product candidates could result in patient injury or death. If any undesirable or unacceptable side effects, unexpected characteristics, or other serious adverse events occur, our clinical trials could be suspended or terminated, and our business and reputation could suffer substantial harm.

There can be no assurance that we will resolve any adverse event issues related to any of our products to the satisfaction of the FDA or any regulatory agency in a timely manner or at all. If in the future we are unable to successfully demonstrate that such adverse events were caused by factors other than our product candidates, the FDA or other regulatory authorities could order us to cease further clinical trials of, or deny approval of, our product candidates. Even if we are able to demonstrate that such serious adverse events are not product candidate-related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete our clinical trials. Moreover, if we elect, or are required, to delay, suspend, or terminate any clinical trial of any of our product candidates, the commercial prospects of such product candidates may be harmed and our ability to generate product revenues from these product candidates may be delayed or eliminated. Any of these occurrences may harm our business, financial condition, results of operations, and prospects.

The FDA may disagree with our regulatory plans and we may fail to obtain regulatory approval of our cell therapy product candidates.

If and when our ANTLER phase 1 clinical trial for our CB-010 product candidate is completed and, assuming positive data, we will propose to advance to a pivotal clinical trial. Although the FDA has found substantial evidence to support approval outside of the traditional phase 1, phase 2, and phase 3 framework for the approved anti-CD19 and anti-BCMA CAR-T cell therapies, the general approach for FDA approval of a new biologic is for the sponsor to provide dispositive data from at least two adequate and well-controlled clinical trials of the relevant biologic in the applicable patient population. Such clinical trials typically involve hundreds of patients, have significant costs, and take years to complete. We do not have agreement or guidance from the FDA that our regulatory development plans will be sufficient for submission of a biologics license application, or

BLA. For example, the FDA may require that we conduct a comparative trial against an approved therapy, such as an approved autologous CAR-T cell therapy, which would significantly delay our development timelines and require substantially more resources. In addition, the FDA may limit our evaluation to patients who have failed or who are ineligible for autologous therapy, patients who may be difficult to treat, or patients with advanced and aggressive cancer, and our product candidates may fail to improve outcomes for such patients.

In addition, the standard of care may change with the approval of new products in the same indications to which our cell therapy product candidates are directed. This may result in the FDA or other regulatory authorities requesting additional studies to show that our product candidate is comparable or superior to the new products.

Our clinical trial results may also not support marketing approval. In addition, our product candidates could fail to receive regulatory approval for many reasons, including:

- the FDA or other regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or other regulatory authorities that our product candidates are safe and effective for their proposed indications;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or other regulatory authorities for approval, including due to heterogeneity of patient populations;
- we may be unable to demonstrate that the clinical and other benefits of our product candidates outweigh the safety risks;
- the data collected from clinical trials of our product candidates may not be sufficient to the satisfaction of the FDA or other regulatory authorities to support the submission of a BLA or a similar filing in foreign jurisdictions;
- the FDA or other authorities will review our manufacturing processes and inspect our CMOs' facilities and may not approve our manufacturing processes or CMOs' facilities; and
- the approval policies or regulations of the FDA or other regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Even if we comply with all FDA requests, we may still fail to obtain regulatory approval. We cannot be sure that we will ever obtain regulatory clearance for our product candidates. Failure to obtain FDA approval of our product candidates will severely undermine our business by leaving us without a commercially marketable product in the United States, and therefore without any source of revenues from product sales in the United States, until another product candidate can be developed or obtained and ultimately approved.

Even if we complete the necessary preclinical studies and clinical trials, the regulatory approval process is expensive, time-consuming, and uncertain, and we may be unable to obtain the regulatory approvals necessary for the commercialization of our product candidates; furthermore, if there are delays in obtaining regulatory approvals, we may not be able to commercialize our products, may lose competitive lead time, and our ability to generate revenues will be materially impaired.

The process of obtaining marketing approvals, both in the United States and in other jurisdictions, is expensive, may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity, and novelty of the product candidates involved. It is impossible to predict if or when any of our product candidates will prove to be safe and effective in humans or if we will receive

regulatory approval for such product candidates, and the risk of failure through the development process is high. Any product candidates we may develop and the activities associated with their development and commercialization, including their manufacture, preclinical and clinical development, safety, efficacy, recordkeeping, labeling, storage, advertising, promotion, sale, and distribution, are subject to comprehensive regulation by the FDA and other regulatory authorities.

Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate in a given jurisdiction. We have not received approval or authorization to market any product candidates from regulatory authorities in any jurisdiction and it is possible that none of our product candidates or any product candidates we may seek to develop in the future will ever obtain marketing approval or commercialization. We have not previously submitted a BLA to the FDA or made a similar submission to any foreign regulatory authority. A BLA must include extensive preclinical and clinical data and supporting information to establish our product candidate's safety and efficacy for each desired indication. The BLA must also include significant information regarding the CMC for our product. Any product candidates we develop may not be effective; may be only moderately effective; or may prove to have undesirable or unintended side effects, toxicities, or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. The FDA and other regulatory authorities have substantial discretion in the approval process and may refuse to accept our BLA applications and decide that our data are insufficient and require additional preclinical studies or clinical trials. The same may happen with review of our product candidates by foreign regulatory authorities. In addition, varying interpretations of the data obtained from preclinical studies and clinical trials could delay, limit, or prevent marketing approval of our product candidates. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render our approved product not commercially viable. If we experience delays in obtaining approval or if we fail to obtain approval of any product candidates we may develop, the commercial prospects for those product candidates and our ability to generate revenues will be materially impaired and we may lose competitive lead time as similar products enter the market.

We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has limited experience with the development of allogeneic T cell and NK cell therapies for cancer. We may also request regulatory approval of future CAR-T or CAR-NK cell therapy product candidates by target, regardless of cancer type or origin, which the FDA may have difficulty accepting if our clinical trials have only involved cancers of certain types or origins. The FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data. The opinion of an Advisory Committee, although not binding, may have a significant impact on our ability to obtain marketing approval of our product candidates based on our completed clinical trials, as the FDA often adheres to an Advisory Committee's recommendations. Accordingly, the regulatory approval pathway for our product candidates may be uncertain, complex, expensive, and lengthy, and approval may not be obtained.

The regulatory landscape that will govern our product candidates is uncertain; regulations relating to more established gene therapy and cell therapy products are still developing, and changes in regulatory requirements could result in delays or discontinuation of development of our product candidates or unexpected costs in obtaining regulatory approval.

Because we are developing novel CAR-T and CAR-NK cell therapy product candidates that are unique biological entities, the regulatory requirements that we will be subject to are not entirely clear. Even with respect to more established products that fit into the categories of gene therapies or cell therapies, the regulatory landscape is still developing. For example, regulatory requirements governing gene therapy products and cell therapy products have changed frequently and may continue to change in the future. Moreover, there is substantial, and sometimes uncoordinated, overlap in those responsible for regulation of existing gene therapy products and cell therapy products. For example, in the United States, the FDA has established the Office of Tissues and Advanced Therapies, OTAT, formerly known as the Office of Cellular, Tissue and Gene Therapies, OCTGT, within its Center for Biologics Evaluation and Research, CBER, to consolidate the review of gene

therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER on its review. Gene therapy clinical trials are also subject to additional review and oversight by an institutional biosafety committee, IBC, a local institutional committee that reviews and oversees basic and clinical research conducted at the institution participating in the clinical trial. Although the FDA decides whether individual gene therapy protocols may proceed, review process and determinations of other reviewing bodies can impede or delay the initiation of a clinical trial, even if the FDA has reviewed the study and cleared its initiation. Conversely, the FDA can place an IND on clinical hold even if such other entities have provided a favorable review. Furthermore, each clinical trial must be reviewed and approved by an independent IRB at or servicing each institution at which a clinical trial will be conducted. In addition, adverse events in clinical trials conducted by others may cause the FDA or other regulatory bodies to change the requirements for approval of any of our product candidates.

We may apply for Regenerative Medicine Advanced Therapy designation, Breakthrough Therapy Designation, and Fast Track Designation review by the FDA for some, if not all, of our allogeneic CAR-T and CAR-NK cell therapies, but there are no assurances that we will receive any of these forms of review or that the FDA will grant priority review to any of our product candidates.

We may seek Regenerative Medicine Advanced Therapy, or RMAT, designation for some or all of our CAR-T and CAR-NK cell therapy product candidates in the United States. In 2017, the FDA established the RMAT designation as part of its implementation of the 21st Century Cures Act to expedite review of any biologic or drug that meets the following criteria: it qualifies as a RMAT, which is defined as a cell and gene therapy, therapeutic tissue engineering product, human cell and tissue product, or any combination product using such therapies or products, with limited exceptions; it is intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition; and preliminary clinical evidence indicates that the biologic has the potential to address unmet medical needs for such a disease or condition. Like Breakthrough Therapy Designation, RMAT designation provides potential benefits that include early interactions and more frequent meetings with the FDA to discuss the development plan for the product candidate and eligibility for rolling review and priority review. Product candidates granted RMAT designation may also be eligible for accelerated approval on the basis of surrogate or intermediate clinical trial endpoints reasonably likely to predict long-term clinical benefit, or reliance upon data obtained from a meaningful number of sites, including through expansion to additional sites. RMAT-designated products that receive accelerated approval may, as appropriate, fulfill their post-approval requirements through the submission of clinical evidence, clinical trials, patient registries, or other sources of real-world evidence such as electronic health records, through the collection of larger confirmatory data sets as agreed with the FDA, or via post-approval monitoring of all patients treated with such therapy prior to approval of the therapy. There is no assurance that we will be able to obtain RMAT designation for any of our product candidates. RMAT designation does not change the FDA's evidentiary standards for product approval, including demonstrating safety and efficacy and there is no assurance that such designation will result in expedited review or approval or that the approved indication will not be narrower than the indication covered by the designation. Additionally, RMAT designation can be rescinded if the criteria for eligibility cease to be met as clinical data emerge.

We may also seek Breakthrough Therapy Designation for some or all of our CAR-T and CAR-NK cell therapy product candidates. A breakthrough therapy is defined as a therapy that is intended, alone or in combination with one or more other therapies, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the therapy may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For therapies that have been designated as breakthrough therapies, interaction and communication between the FDA and us can help to identify the most efficient path for clinical development. Therapies designated as breakthrough therapies by the FDA may also be eligible for priority review and accelerated approval. Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a

Breakthrough Therapy Designation for a product candidate may not result in a faster development process, review, or approval compared to therapies considered for approval under conventional FDA procedures and does not ensure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that such product candidates no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

We may also seek Fast Track Designation for some or all of our CAR-T and CAR-NK cell therapy product candidates. If a therapy is intended for the treatment of a serious or life-threatening condition and the therapy demonstrates the potential to address unmet medical needs for this condition, we may apply for Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation, we cannot assure that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review, or approval compared to conventional FDA procedures. For Fast Track product candidates, we might have more interactions with the FDA and the FDA may initiate review of sections of a Fast Track product marketing application before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by us, that a Fast Track product candidate may be effective. We will also be required to provide, and the FDA must approve, a schedule for the submission of the remaining information and we will be required to pay applicable user fees. However, the FDA's time period goal for reviewing an application does not begin until the last section of the application is submitted. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program. Fast Track Designation alone does not guarantee qualification for the FDA's priority review procedures.

Finally, if the FDA determines that a product candidate offers a treatment for a serious condition and, if approved, the product would provide a significant improvement in safety or efficacy, the FDA may designate the product candidate for priority review. A priority review designation means that the goal for the FDA to review a BLA application is six months, rather than the standard review period of ten months. The FDA has broad discretion with respect to whether or not to grant priority review status to a product candidate, so even if we believe a particular product candidate is eligible for such designation or status, the FDA may decide not to grant it. Moreover, a priority review designation does not necessarily result in expedited regulatory review or approval process or necessarily confer any advantage with respect to approval compared to conventional FDA procedures. Receiving priority review from the FDA does not guarantee approval within the six-month review cycle or at all.

We may seek orphan drug designation for some or all of our allogeneic CAR-T and CAR-NK cell therapy product candidates across various indications, but we may be unable to obtain such designations or to maintain the benefits associated with orphan drug designation, including market exclusivity, which may cause our revenue, if any, to be reduced.

Under the Orphan Drug Act, the FDA may grant orphan designation to a biologic or drug intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States when there is no reasonable expectation that the cost of developing and making available the biologic or drug in the United States will be recovered from sales in the United States for that biologic or drug. In order to obtain orphan drug designation, we must make a request before submitting our BLA for a particular product candidate. After the FDA grants orphan drug designation, the generic or trade name, or the chemical name or a meaningful description of our biologic, its designated orphan use and date of designation, and our company name are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If a product candidate that has orphan drug designation subsequently receives the first FDA approval of that particular product for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a BLA, to market the

same biologic for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that we, as holder of the orphan drug exclusivity, have not shown that we can ensure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve other biologics that do not have the same principal molecular structural features for use in treating the same indication or disease or the same biologic for a different indication or disease during the exclusivity period. Furthermore, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product or if a subsequent applicant demonstrates clinical superiority over our product.

We plan to seek orphan drug designation for some or all of our allogeneic CAR-T and CAR-NK cell therapy product candidates in specific orphan indications in which there is a medically plausible basis for the use of these products. Even if we obtain orphan drug designation, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to ensure sufficient quantities of the product to meet the needs of patients with the rare disease or condition, or if a subsequent applicant demonstrates clinical superiority over our products, if approved. In addition, although we may seek orphan drug designation for our product candidates, we may never receive such designations.

Our allogeneic CAR-T and CAR-NK cell therapy product candidates will be regulated as biological products, or biologics, and therefore may be subject to uncertainty regarding regulatory exclusivity.

The Biologics Price Competition and Innovation Act of 2009, or BPCIA, was enacted as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or, collectively, the Affordable Care Act or the ACA, to establish an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as “interchangeable” based on its similarity to an approved biologic. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the reference product was approved under a BLA. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty and could have a material adverse effect on the future commercial prospects for our biological products. We believe that our product candidates should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for biosimilar competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of the reference products in a way that is similar to traditional generic substitution for drug products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

Even if we obtain marketing approvals for our product candidates, the terms of such approvals and ongoing regulation of our products could require substantial expenditure of resources and may limit how we manufacture and market our products, which could materially impair our ability to generate revenues. Any product candidate for which we obtain marketing approval could be subject to restrictions or withdrawal from the market, and we may be subject to substantial penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.

Any product candidate for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising, and promotional activities for such product, will be subject to continuous requirements of and review by the FDA or other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, including mandatory post-marketing safety reporting; registration and listing requirements; cGMP requirements relating to quality control, quality assurance, and corresponding maintenance of records and documents; and requirements regarding

recordkeeping. Even if we receive marketing approval of a product candidate, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval or contain requirements for costly post-marketing testing and studies to further assess the safety or efficacy of the product. The FDA also may place other conditions on our approval, including the requirement for a Risk Evaluation and Mitigation Strategy, or REMS, to ensure the safe use of the product by reinforcing medication use behaviors and actions. If the FDA concludes a REMS is needed, we must submit a proposed REMS before our product candidate will be eligible to receive marketing approval. A REMS could include medication guides, physician communication plans, or other elements to ensure safe use, such as restricted distribution methods, patient registries, and other risk minimization tools.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit, or delay regulatory approval of our product candidates. If we are slow to address or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects, and ability to achieve or sustain profitability. Any government investigation of alleged violations of law, including investigations of any of suppliers or CMOs, could require us to expend significant time and resources in response and could generate negative publicity. Accordingly, we and our suppliers and CMOs will continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance, and quality control. If we are not able to comply with post-approval regulatory requirements, we could have the marketing approval for our products withdrawn by regulatory authorities and our ability to market any product candidates could be limited, which could adversely affect our ability to achieve or sustain profitability. Furthermore, the cost of compliance with post-approval regulations, including REMS, may have a negative effect on our business, financial condition, results of operations, and prospects.

The FDA and other regulatory authorities closely regulate the post-approval marketing and promotion of biologics to ensure that they are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA and other regulatory authorities impose stringent restrictions on manufacturers' communications regarding off-label use, and if we market our products for unapproved indications, we may be subject to enforcement action for off-label marketing by the FDA and other federal and state enforcement agencies, including the U.S. Department of Justice. Violation of the federal Food, Drug, and Cosmetic Act, or the FDCA, and other statutes, including the federal False Claims Act, relating to the promotion and advertising of prescription products, may also lead to investigations or allegations of violations of federal and state healthcare fraud and abuse laws and state consumer protection laws.

In addition, later discovery of previously unknown problems with our products or the manufacturing of our products, may cause:

- restrictions on our products or the manufacturing of our products;
- restrictions on the labeling or marketing of our products;
- restrictions on the distribution or use of our products;
- requirements to conduct post-marketing clinical trials;
- receipt of warning or untitled letters;
- withdrawal of our products from the market;
- refusal to approve pending BLAs or BLA supplements that we submit;
- recall of our products;

- fines, restitution, or disgorgement of profits or revenue;
- suspension or withdrawal of marketing approvals;
- suspension of any ongoing clinical trials;
- refusal to permit the import or export of our products;
- product seizure; and
- injunctions or the imposition of civil or criminal penalties.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity and adversely affect our reputation. The occurrence of any event or penalty described above may inhibit our ability to commercialize any product candidates we develop and adversely affect our business, financial condition, results of operations, and prospects.

We may never obtain approval to commercialize our product candidates outside the United States, which could limit our ability to recognize the full market potential of our product candidates and could materially impair our ability to generate revenues.

In order to market and sell any of our product candidates in the European Union, or EU, or other foreign jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and jurisdictions and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other jurisdictions. The failure to obtain approval in one jurisdiction may negatively impact our ability to obtain approval elsewhere. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our product candidates in multiple jurisdictions, which could materially impair our ability to generate revenue.

In June 2016, the electorate in the United Kingdom voted in favor of leaving the EU, commonly referred to as Brexit. Following protracted negotiations, the United Kingdom left the EU on January 31, 2020. Under the withdrawal agreement, there is a transitional period, during which EU laws continued to apply in the United Kingdom, which ended on December 31, 2020. The United Kingdom and EU have signed an EU-UK Trade and Cooperation Agreement, which became provisionally applicable on January 1, 2021 and which has entered into force permanently on May 1, 2021, following formal approval by the United Kingdom and the EU. This agreement provides details on how some aspects of the United Kingdom and the EU's relationship regarding pharmaceutical products will operate; however, there are still many uncertainties. Since the regulatory framework in the United Kingdom covering quality, safety, and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales, and distribution of pharmaceutical products is derived from EU directives and regulations, Brexit could materially impact the future regulatory regime which applies to products and the approval of product candidates in the United Kingdom or the EU, as there is now potential for the UK regulations on pharmaceutical products to diverge from the EU regulations. It remains to be seen how Brexit will impact regulatory requirements for product candidates and products in the United Kingdom in the long-term. In the meantime, the Medicines and Healthcare products Regulatory Agency, or the MHRA, the United Kingdom medicines and medical devices regulator, has published detailed guidance for industry and organizations to follow from January 1, 2021, which will be updated as necessary. Any delay in obtaining, or an inability to obtain, any marketing approvals, as a result of Brexit or otherwise, may force us to restrict or delay efforts to seek regulatory approval in the United Kingdom for our product candidates, which could harm our business.

Negative public opinion and increased regulatory scrutiny of genetic research and therapies involving genome editing may damage public perception of our product candidates generated through genome editing or adversely affect our ability to conduct our business or obtain regulatory approvals for our product candidates.

The chRDNA genome-editing technologies that we use are novel. Public perception may be influenced by claims that genome editing is unsafe, and therapeutic products generated through genome editing may not gain the acceptance of the public or the medical community. In particular, our success will depend upon physicians specializing in our targeted diseases prescribing our product candidates, if approved for marketing, as treatments in lieu of, or in addition to, existing, more familiar treatments for which greater clinical data may be available. Any increase in negative perceptions of genome editing may result in fewer physicians prescribing our treatments or may reduce the willingness of patients to accept our products. In addition, given the novel nature of genome-edited and CAR-T and CAR-NK cell therapies, governments may place import, export, or other restrictions in order to retain control or limit the use of such technologies. Increased negative public opinion or more restrictive government regulations, either in the United States or internationally, could have a negative effect on our business or financial condition and may delay or impair the commercialization of our product candidates or demand for such products.

In particular, genome-editing technology is subject to public debate and heightened regulatory scrutiny due to ethical concerns relating to the potential application of genome-editing technology to human embryos or the human germline. We do not apply genome-editing technologies to human embryos or the human germline. In April 2016, a group of scientists reported on their attempts to edit the genome of human embryos to modify the gene for hemoglobin beta. This is the gene in which a mutation occurs in patients with the inherited blood disorder beta thalassemia. Although this research was purposefully conducted in embryos that were not viable, the work prompted calls for a moratorium or other types of restrictions on genome editing of human eggs, sperm, and embryos. Additionally, in November 2018, He Jiankui, Ph.D., a biophysics researcher who was an associate professor in the Department of Biology of the Southern University of Science and Technology in Shenzhen, China, reportedly claimed he had created the first human genome-edited babies, twin girls. This claim, and another that Dr. He had helped create a second genome-edited pregnancy, was subsequently confirmed by Chinese authorities and was negatively received by the public, in particular by those in the scientific community. News reports indicate that Dr. He was sentenced to three years in prison and reportedly fined $430,000 in December 2019 by the Chinese government for illegal medical practice in connection with such activities. In the wake of the claim, the World Health Organization established a new advisory committee to create global governance and oversight standards for human genome editing. The Alliance for Regenerative Medicine in Washington, D.C., of which we are a member, has called for a voluntary moratorium on the use of genome-editing technologies, including CRISPR, in research that involves altering human embryos or human germline cells and has also released a bioethical framework of principles for the use of genome editing in therapeutic applications endorsed by a number of companies that use genome-editing technologies. Similarly, the NIH has announced that it would not fund any use of genome-editing technologies in human embryos, noting that there are multiple existing legislative and regulatory prohibitions against such work, including the Dickey-Wicker Amendment, which prohibits the use of appropriated funds for the creation of human embryos for research purposes or for research in which human embryos are destroyed.

Although we do not use our genome-editing technologies to edit human embryos or the human germline, such public debate about the use of genome-editing technologies in human embryos and heightened regulatory scrutiny could prevent or delay our development of our product candidates and, if approved, the market acceptance of our products. More restrictive government regulations or negative public opinion would have a negative effect on our business or financial condition. Adverse events in our clinical trials or those of our competitors or of academic researchers utilizing genome-editing technologies, even if not ultimately attributable to product candidates we may identify and develop, and the resulting publicity, could result in increased governmental regulation, unfavorable public perception, potential regulatory delays in the testing or approval of our product candidates, stricter labeling requirements for those product candidates that are approved, and a decrease in demand for any such product candidates.

We currently have no marketing and sales organization and as a company have no experience in marketing products. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be able to generate product revenue.

To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must develop and build a sales and marketing team or make arrangements with third parties to perform these services. There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay our product launch. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train, and retain marketing and sales personnel. If the commercial launch of our product for which we have recruited a sales force and established marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses, which may be costly and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize our products on our own include:

- our inability to recruit, hire, train, and retain adequate numbers of effective sales, marketing, customer service, medical affairs, and other support personnel;
- our inability to equip sales personnel with effective materials, including sales literature, to help them educate physicians and other healthcare providers regarding our product candidates and their approved indications;
- our inability to effectively manage a geographically dispersed sales and marketing team;
- the inability of medical affairs personnel to negotiate arrangements for reimbursement and other acceptance by payors;
- the inability to price our products at a sufficient price point to ensure an adequate and attractive level of profitability; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we are unable or decide not to establish internal sales, marketing, and distribution capabilities, we will need to enter into arrangements with third parties to perform sales, marketing, and distribution services. In such cases, our product revenue or the profitability to us from these revenue streams is likely to be lower than if we were to market and sell any product candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties and they may fail to devote the necessary resources and attention to sell and market our product candidates effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we may not be successful in commercializing our product candidates, and our business, financial condition, results of operations, and prospects will be materially adversely affected.

Our products may not gain market acceptance among physicians, patients, hospitals, cancer treatment centers, and others in the medical community.

The use of CAR-T and CAR-NK cells as potential cancer treatments is a recent development and may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers, and others in the medical community. Ethical, social, and legal concerns about genome editing could result in the development of

additional regulations restricting or prohibiting our products. Even with the requisite approvals from the FDA and other regulatory authorities internationally, the commercial success of our product candidates will depend, in significant part, on the acceptance of physicians, patients, and healthcare payors of products generated through genome editing in general, and our allogeneic CAR-T and CAR-NK cell therapy product candidates in particular, as medically necessary, cost-effective, safe, and effective therapies. We expect physicians in the large bone marrow transplant centers to be particularly important to the market acceptance of our CB-010, CB-011, and CB-012 product candidates and we may not be able to adequately educate them on the benefits and risks associated with the use of our product candidates to address concerns and foster acceptance, for many reasons. For example, certain of the product candidates that we will be developing target a cell surface marker that may be present on cancer cells as well as non-cancerous cells. It is possible that our product candidates may kill these non-cancerous cells, which may result in unacceptable side effects, including death.

Additional factors will influence whether our product candidates are accepted in the market, including:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals, cancer treatment centers, and patients considering our product candidates as safe and effective treatments;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence, identification, or severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities, including limitations or warnings contained in the product labeling;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment of our product candidates in relation to alternative treatments;
- the availability of coverage and adequate reimbursement by third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket for our product candidates in the absence of coverage;
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and
- the effectiveness of our sales and marketing efforts.

If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers, or others in the medical community, we will not be able to generate significant revenue. Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new cell therapy products, genome-editing technologies, or other therapeutic approaches are introduced that are more favorably received than our products, are more cost effective, or render our products obsolete.

The market opportunities for our product candidates may be smaller than we currently believe and limited to those patients who are ineligible for or have failed prior treatment, which may adversely affect our business. Because the target patient populations of our product candidates are small, we must be able to successfully identify patients and capture a significant market share to achieve profitability and growth.

Our projections of both the number of patients who have the cancers we are targeting, as well as the subset of patients with these cancers in a position to receive second or later lines of therapy and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. New studies may change the estimated incidence or prevalence of these cancers. The number of eligible patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates. Given the small number of patients who have the eligibility criteria and diseases that we are targeting, it is critical to our ability to become profitable that we successfully identify such patients. The effort to identify patients with diseases we seek to treat is in early stages, and we cannot accurately predict the number of patients for whom treatment might be possible. Additionally, the potentially addressable patient population for each of our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or gain access to, which would adversely affect our business, financial condition, results of operations, and prospects. Even if we obtain significant market share for our product candidates, because the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications.

Even if we are able to commercialize our product candidates, such products may be subject to unfavorable pricing regulations, third-party reimbursement practices, or healthcare reform initiatives, which could harm our business.

The regulations that govern marketing approvals, pricing, and reimbursement for new biologic products vary widely from country to country. Some countries require approval of the sale price of a product before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some non-U.S. markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial marketing approval is granted. As a result, we might obtain marketing approval for our product candidates in a particular country, but then be subject to price regulations that delay our commercial launch of such product candidates, possibly for lengthy time periods, and such delays would negatively impact the revenues we are able to generate from the sale of our product candidates in that country. Pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if any product candidates we may develop obtain marketing approval.

Successful sales of our product candidates, if approved, depend on the availability of coverage and adequate reimbursement from third-party payors including governmental healthcare programs, managed care organizations, and commercial payors, among others. Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In addition, because our product candidates represent new approaches to the treatment of cancer, we cannot accurately estimate the potential revenue from our product candidates. Patients who are provided medical treatment for their conditions often rely on third-party payors to reimburse all or part of the costs associated with their treatment. Obtaining coverage and adequate reimbursement from third-party payors is critical to new product acceptance. The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if government and other third-party payors fail to provide coverage and adequate reimbursement. We expect downward pressure on pharmaceutical pricing to continue. Furthermore, coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more of our product candidates for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

There may be significant delays in obtaining reimbursement for newly approved products, and reimbursement coverage may be more limited than the purposes for which the product is approved by the FDA or

similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that our product candidates will be paid for in all cases or at a rate that will cover our costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of our product candidate and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost products, and may be incorporated into existing payments for other services. Net prices for our product candidates may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of products from countries where our product candidates may be sold at lower prices than in the United States.

Third-party payors, whether domestic or foreign, governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to healthcare systems that could impact our ability to sell our product candidates, if approved, profitably. There have been, and likely will continue to be, legislative and regulatory proposals at the federal and state levels directed at broadening the availability of, and containing or lowering the cost of, healthcare. The implementation of cost containment measures that third-party payors and healthcare providers are instituting and any other healthcare reforms may prevent us from being able to generate, or may reduce, our revenues from the sale of our product candidates, if approved, and our product candidates may not be profitable. Such reforms could have an adverse effect on anticipated revenue from product candidates for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates. Even if our product candidates are successful in clinical trials and receive marketing approval, we cannot provide any assurances that we will be able to obtain and maintain third-party payor coverage or adequate reimbursement for our product candidates in whole or in part.

Enacted and future healthcare legislation may increase the difficulty and cost for us to obtain approval of and commercialize our product candidates and could adversely affect our business.

The federal Affordable Care Act substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act, among other things: (i) introduced a new average manufacturer price definition for biologics and drugs that are inhaled, infused, instilled, implanted, or injected and not generally dispensed through retail community pharmacies; (ii) increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and expanded rebate liability from fee-for-service Medicaid utilization to include the utilization of Medicaid managed care organizations as well; (iii) established a branded prescription drug fee that pharmaceutical manufacturers of branded prescription drugs must pay to the federal government; (iv) expanded the list of covered entities eligible to participate in the 340B drug pricing program; (v) established a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% (increased from 50% in 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; (vi) expanded eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability; (vii) created a licensure framework for follow on biologic products; and (viii) established a Center for Medicare & Medicaid Innovation, or CMMI, at the Centers for Medicare and Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending. Since its enactment, there have been judicial challenges to certain aspects of the Affordable Care Act, as well as efforts by Congress to repeal or replace certain aspects of the Affordable Care Act. In the future, Congress may consider other legislation to repeal or replace elements of the Affordable Care Act, agencies may further alter their implementation of elements of the Affordable Care Act, and other judicial challenges to elements of the

Affordable Care Act may be brought. The extent to which any such changes may impact our business or financial condition is uncertain.

Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. The American Taxpayer Relief Act of 2012, or ATRA, among other things, reduced Medicare payments to several providers, including hospitals, imaging centers, and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. New laws may result in additional reductions in Medicare and other healthcare funding, which may materially adversely affect customer demand and affordability for our product candidates and, accordingly, our business, financial condition, results of operations, and prospects. Additional changes that may affect our business include the expansion of new programs such as Medicare payment for performance initiatives for physicians under the Medicare Access and CHIP Reauthorization Act of 2015, or MACRA, which first affected physician payment in 2019. At this time, it is unclear how the introduction of the Medicare quality payment program will impact overall physician reimbursement.

Also, there has been heightened governmental scrutiny over the manner in which drug manufacturers set prices for their marketed products, which have resulted in several congressional inquiries and proposed bills and initiatives, as well as state efforts, designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products.

We expect that these and other healthcare reform measures in the future, may result in more rigorous coverage criteria and lower reimbursement, and in addition, downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may hinder us in generating revenue, attaining profitability, or commercializing our cell therapy products once, and if, marketing approval is obtained.

In the EU, coverage and reimbursement status of any product candidates for which we obtain regulatory approval are provided for by the national laws of EU member states. The requirements may differ across the EU member states. In markets outside the United States and the EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. Also, at the national level, actions have been taken to enact transparency laws regarding payments between pharmaceutical companies and healthcare professionals.

We cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative action in the United States, the EU, or any other jurisdiction. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that we may have obtained and we may not achieve or sustain profitability.

We face significant competition from other biotechnology and pharmaceutical companies, which may result in other companies developing or commercializing products before, or more successfully than, we do, thus rendering our product candidates non-competitive or reducing the size of our market, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industry, and the genome-editing, cell therapy, and immuno-oncology industries specifically, is characterized by intense competition and rapid innovation. Our potential competitors include major multi-national pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, and universities and other research institutions. Many of our competitors have substantially greater financial, technical, and other resources, such as larger research and development staffs, established

manufacturing capabilities and facilities, and experienced marketing organizations with well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies that have greater resources. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated on our competitors. Competition may increase further as a result of advances in the commercial applicability of genome editing or other new technologies and greater availability of capital for investment in these industries. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient enrollment for participation in clinical trials, as well as in acquiring technologies complementary to, or necessary for, our development programs. In addition, due to the intense research and development taking place in the genome-editing field, including by us and our competitors, the intellectual property landscape is in flux and highly competitive. There may be significant intellectual property-related litigation and proceedings relating to our owned and in-licensed, and other third-party, intellectual property rights in the future. Our commercial opportunities could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient to administer, have broader acceptance and higher rates of reimbursement by third-party payors, or are less expensive than any product candidates that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, genome-editing technologies developed by our competitors may render our product candidates uneconomical or obsolete, and we may not be successful in marketing any product candidates we may develop against competitor products. The key competitive factors affecting the success of all of our product candidates are likely to be their efficacy, safety, and availability of reimbursement.

Our focus is on the development of cell therapies using our chRDNA genome-editing technology. We are aware of several companies focused on developing therapies for various indications using CRISPR-Cas9 genome-editing technology including CRISPR Therapeutics AG, Editas Medicine, Inc., and Intellia. In addition, several academic groups have developed new genome-editing technologies based on CRISPR-Cas9, such as base editing and prime editing, as well as alternative CRISPR systems, which may have utility in therapeutic development. We believe companies such as Beam Therapeutics Inc., Metagenomi Technologies, LLC, Prime Medicine, Inc., and Scribe Therapeutics, Inc. are developing alternative CRISPR systems. Multiple academic labs and companies have also published on other CRISPR-associated nuclease variants that can edit human DNA. There are also companies developing therapies using non-CRISPR genome-editing technologies, such as transcription activator-like effector nucleases, meganucleases, and zinc finger nucleases. These companies include Allogene Therapeutics, Inc., bluebird bio, Inc., Cellectis S.A., Precision BioSciences, Inc., and Sangamo Therapeutics. In addition to competition from other genome-editing therapies or gene or cell therapies, any product we may develop may also face competition from other types of therapies, such as small molecule, antibody, or protein therapies.

Our allogeneic CAR-T and CAR-NK cell therapy product candidates face significant competition from multiple companies, including Allogene, Atara Biotherapeutics, Inc., Cellectis, Celyad Oncology SA, CRISPR Therapeutics AG, Fate Therapeutics, Inc., Poseida Therapeutics, Inc., Precision BioSciences, and Sangamo Therapeutics. There are over 200 preclinical- and clinical-stage autologous and allogeneic anti-CD19 CAR-T programs, some of which will be competitive with our CB-010 product candidate, and over 90 preclinical- and clinical-stage autologous and allogeneic anti-BCMA CAR-T programs, some of which will be competitive with our CB-011 product candidate. Additionally, other companies are developing allogeneic CAR-T cell therapies for AML.

To become and remain profitable, we must develop and eventually commercialize product candidates with significant market potential, which will require us to be successful in a range of challenging activities. These activities can include completing preclinical studies and clinical trials of our product candidates; obtaining marketing and reimbursement approval for these product candidates; manufacturing, marketing, and selling those products that are approved; and satisfying any post-marketing requirements. We may never succeed in any or all

of these activities and, even if we do, we may never generate revenues that are significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the price of our common stock and could impair our ability to raise capital, maintain our research and development efforts, expand our business, or continue our operations. A decline in the price of our common stock also could cause stockholders to lose all or part of their investment.

Our business operations and current and future relationships with clinical site investigators, healthcare professionals, consultants, third-party payors, patient organizations, and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties.

Our business operations and current and future arrangements with clinical site investigators, healthcare professionals, consultants, third-party payors, patient organizations, and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we market, sell, and distribute our product candidates, if approved. Such laws include:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving, or providing any remuneration (including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order, or recommendation of, any good, facility, item, or service, for which payment may be made, in whole or in part, under U.S. federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the U.S. federal civil and criminal false claims laws, including the civil False Claims Act, which, among other things, impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the U.S. government, claims for payment or approval that are false or fraudulent; knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim; or from knowingly making a false statement to avoid, decrease, or conceal an obligation to pay money to the U.S. government. In addition, the government may assert that a claim including items and services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- the U.S. federal civil monetary penalties laws, which impose civil fines for, among other things, the offering or transfer of remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary's selection of a particular provider, practitioner, or supplier of services reimbursable by Medicare or a state healthcare program, unless an exception applies;

- the U.S. Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for, healthcare benefits, items, or services; similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, which also imposes certain obligations, including

mandatory contractual terms, with respect to safeguarding the privacy, security, and transmission of individually identifiable health information without appropriate authorization by covered entities subject to the rule, such as health plans, healthcare clearinghouses, and healthcare providers as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information;

- the U.S. Food, Drug, and Cosmetic Act, which prohibits, among other things, the adulteration or misbranding of drugs, biologics, and medical devices;

- the U.S. Physician Payments Sunshine Act and its implementing regulations, which requires certain manufacturers of drugs, devices, biologics, and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program to report annually to the government information related to certain payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members;

- U.S. federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;

- analogous U.S. state laws and regulations, including state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales, and marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; state and local laws that require the registration of pharmaceutical sales representatives; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts; and

- similar healthcare laws and regulations in the EU and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers and laws governing the privacy and security of certain protected information, such as the General Data Protection Regulation, or the GDPR, which imposes obligations and restrictions on the collection and use of personal data, including health data, relating to individuals located in the EU.

Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices, including our relationships with physicians and other healthcare providers, may not comply with current or future statutes, regulations, agency guidance, or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal, and administrative penalties; damages; fines; exclusion from government-funded healthcare programs, such as Medicare and Medicaid or similar programs in other jurisdictions; integrity oversight and reporting obligations to resolve allegations of non-compliance; disgorgement; individual imprisonment; contractual damages; reputational harm; diminished profits; and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be

subject to criminal, civil, or administrative sanctions, including exclusions from government-funded healthcare programs and imprisonment, which could affect our ability to operate our business. Furthermore, defending against any such actions can be costly, time-consuming, and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

Our business activities will be subject to the U.S., and may be subject to certain foreign, export and import controls, embargoes, anti-corruption laws, and anti-money laundering laws and regulations including the Foreign Corrupt Practices Act, or FCPA.

We will be subject to export control and import laws and regulations, including the U.S. Export Administration Regulations; U.S. Customs regulations; various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls; the U.S. Foreign Corrupt Practices Act of 1977, as amended; the U.S. domestic bribery statute contained in 18 U.S.C. § 201; the U.S. Travel Act; the USA PATRIOT Act of 2001; and other state and national anti-bribery and anti-money laundering laws in the jurisdictions in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties to sell our product candidates outside the United States once we receive regulatory approval in such jurisdictions or to obtain necessary permits, licenses, and other regulatory approvals for our product candidates. We may also have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of these activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

If we expand our business activities outside the United States, we will be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations, and rules of other countries in which we may operate. The FCPA generally prohibits offering, promising, giving, or authorizing others to give anything of value, either directly or indirectly, to a non-United States government official in order to influence official action, or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the company and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including, potentially in the future, officials of non-United States governments. Additionally, in many other countries, the healthcare providers who prescribe pharmaceuticals are employed by their government, and the purchasers of pharmaceuticals are government entities; therefore, our dealings with these prescribers and purchasers will be subject to regulation under the FCPA. Recently the U.S. Securities and Exchange Commission, or SEC, and the U.S. Department of Justice have increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies. There is no certainty that all of our employees, suppliers, CMOs, CROs, or other third parties providing services to us will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines; criminal sanctions against us, our management, or other employees; the closing down of facilities, including those of our suppliers and CMOs; requirements to obtain export licenses; cessation of business activities in sanctioned countries; implementation of compliance programs; and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our product candidates in one or more jurisdictions as well as difficulties in manufacturing or continuing to develop our product candidates, and could materially damage our reputation, our ability to attract and retain employees, and our business, financial condition, results of operations, and prospects.

We face potential liability related to the privacy of health information we may obtain from our clinical trials.

Most healthcare providers are subject to privacy and security regulations promulgated under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health, or HITECH, Act. We are not currently classified as a covered entity or business associate under HIPAA and thus are not subject to its requirements or penalties. However, any person may be prosecuted under HIPAA's criminal provisions either directly or under aiding-and-abetting or conspiracy principles. Consequently, depending on the facts and circumstances, we could face substantial criminal penalties if we knowingly receive individually identifiable health information from a HIPAA-covered healthcare provider or research institution that has not satisfied HIPAA's requirements for disclosure of individually identifiable health information. In addition, in the event that we receive sensitive personally identifiable information, including health information, we may be subject to state laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health information protected by HIPAA.

We cannot assure you that we, our CROs, our clinical trial sites, and our clinical trial principal investigators with access to personally identifiable and other sensitive or confidential information relating to the patients in our clinical trials will not breach contractual obligations, or that we or they will not experience data security breaches or attempts thereof, which could have a corresponding effect on our business, including putting us in breach of our obligations under privacy laws and regulations as discussed above, which could in turn adversely affect our business, financial condition, results of operations, and prospects. We cannot assure you that our contractual measures and our own privacy and security-related safeguards will protect us from the risks associated with the third-party processing, storage, and transmission of such information.

Compliance with global privacy and data security requirements could result in additional costs and liabilities to us or inhibit our ability to collect and process data globally, and the failure to comply with such requirements could subject us to significant fines and penalties, which may have a material adverse effect on our business, financial condition, results of operations, or prospects.

The regulatory framework for the collection, use, safeguarding, sharing, transfer, and other processing of information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Globally, many jurisdictions have established their own data security and privacy frameworks. In the United States, there are a broad variety of data protection laws that are either currently in place or under way and a wide range of enforcement agencies at both the state and federal levels have the authority to review companies for privacy and data security concerns based on general consumer protection laws. The Federal Trade Commission, or FTC, and state Attorneys General have been aggressive in reviewing privacy and data security protections for consumers. New laws also are being considered at both the state and federal levels. For example, the California Consumer Privacy Act, or CCPA, which went into effect on January 1, 2020 provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Many other states are considering similar legislation. A broad range of legislative measures also have been introduced at the federal level. There also is the threat of consumer class actions related to these laws and the overall protection of personal data.

The data privacy laws in the EU have also been significantly reformed. The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the GDPR, which took effect across all member states of the European Economic Area, or EEA, in May 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR has expanded the definition of personal data to include coded data and requiring changes to informed consent practices and more detailed notices for clinical trial patients and investigators. In addition, the GDPR also

imposes strict rules on the transfer of personal data to countries outside the EU, including the United States and, as a result, increases the scrutiny that clinical trial sites located in the EEA should apply to transfers of personal data from such sites to countries that are considered to lack an adequate level of data protection, such as the United States. The GDPR also permits data protection authorities to require destruction of improperly gathered or used personal information or impose substantial fines for violations of the GDPR, which can be up to 4% of global revenues or €20 million, whichever is greater, and it also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR provides that EU member states may make their own additional laws and regulations limiting the processing of personal data, including genetic, biometric, or health data.

Risks Relating to Our Intellectual Property

If we do not possess intellectual property rights covering our proprietary chRDNA genome-editing technology and our product candidates, we may not be able to block competitors or to compete effectively in our markets.

Our industry is subject to rapid technological change and our success depends in large part on our ability to obtain and maintain intellectual property protection in the United States and other jurisdictions with respect to our chRDNA platform technology and product candidates. We rely upon a combination of patents, owned by us or in-licensed from a third party, and trade secrets to protect our technology and product candidates. We seek to protect our proprietary position by filing patent applications in the United States and in other jurisdictions related to our genome-editing technologies and product candidates that are important to our business. We also rely on know-how and continuing technological innovation to develop and maintain our competitive position. If we are unable to obtain or maintain intellectual property protection with respect to our chRDNA genome-editing platform technology and product candidates, our business, financial condition, results of operations, and prospects could be materially harmed.

The strength of patents in the biotechnology and pharmaceutical fields generally, and the genome-editing field in particular, involves complex legal and scientific questions and can be uncertain. For example, the scope of patent protection that will be available to us in the United States is uncertain. Changes in either the patent laws or their interpretation may diminish our ability to protect our intellectual property; obtain, maintain, defend, and enforce our intellectual property rights; and, more generally, could affect the value of our intellectual property or narrow the scope of our owned or in-licensed patents. With respect to both owned and in-licensed intellectual property, we cannot predict whether the patent applications we and our licensors are currently pursuing will issue as patents, whether the claims of any issued patents will provide sufficient protection, or whether, if these patents are challenged by our competitors, they will be found to be invalid, unenforceable, or not infringed.

The patent prosecution process is expensive, time-consuming, and complex, and we or our licensors may not be able to file, prosecute, maintain, enforce, or license all necessary or desirable patents at a reasonable cost or in a timely manner or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development in time to obtain patent protection before public disclosures are made. Although we may enter into non-disclosure or confidentiality agreements with parties who may have access to patentable aspects of our research and development, such as our employees, collaborators, CMOs, consultants, CROs, clinical trial site investigators and personnel, and other third parties, any one of these parties may breach their confidentiality agreements and disclose innovations before we can file a patent application, thereby jeopardizing our ability to seek patent protection.

The U.S. Patent and Trademark Office, or USPTO, requires compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. The ultimate outcome of our pending patent applications is uncertain and the coverage claimed in a patent application can be significantly reduced before the patent is issued. Even as our patent applications, or those of our licensors, currently or in the future, issue as patents, they may not issue in a form that will provide us with any meaningful

protection, prevent competitors or other third parties from competing with us, dissuade companies from collaborating with us, or otherwise provide us with any competitive advantage. Periodic maintenance fees on issued patents are also required to be paid over the lifetime of the patent. Although an inadvertent lapse can, in many cases, be cured by payment of a late fee or by other means in accordance with applicable laws and regulations, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in the loss of patent rights. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, nonpayment of fees, failure to properly legalize and submit formal documents, and the like. In the event we experience noncompliance events that cannot be corrected and we lose our patent rights, competitors could enter the market, which would have a material adverse effect on our business.

Composition of matter patents for biological and pharmaceutical products, such as CAR-based cell therapy products, often provide a strong form of intellectual property protection as such patents provide protection without specifying any particular method of use or manufacture. Methods of use patents can protect particular applications of a product or the manufacturing of a product; however, such method claims do not prevent a competitor from using a product that is identical to our product for an indication that is outside the scope of the patented method of use or making a product that is identical to our product using a different method of manufacturing. Our allogeneic CAR-T and CAR-NK cell therapy product candidates do not contain our chRDNA genome-editing technology; rather, our chRDNAs are used in the manufacturing of our CAR-T and CAR-NK products. It is virtually impossible to determine whether a competitor has infringed our chRDNA patents in making their products. Thus, even if we obtain patent protection on certain aspects of our technologies, such protection may not be enough to block our competitors from entering the market.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, maintaining, enforcing, and defending patents on our genome-editing technologies and product candidates in countries outside the United States is expensive. Prosecution of patent applications is often a longer process and patents may grant at a later date, and with a shorter term, than in the United States. The requirements for patentability differ in certain jurisdictions and countries. Additionally, the patent laws of some countries do not afford intellectual property protection to the same extent as the laws of the United States. For example, unlike patent law in the United States, patent law in most European countries and many other jurisdictions precludes the patentability of methods of treatment and diagnosis of the human body. Other countries may impose substantial restrictions on the scope of claims, limiting patent protection to specifically disclosed embodiments. Consequently, we may not be able to prevent third parties from practicing our inventions in major markets outside the United States, or from selling or importing products into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may export otherwise infringing products to jurisdictions where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent such competition. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in intellectual property laws in various jurisdictions worldwide.

Many companies have encountered significant problems in enforcing and defending intellectual property rights in various jurisdictions globally. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property rights generally. Proceedings to enforce our intellectual property rights in various jurisdictions globally could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, could put related patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we file, and the damages or other

remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage against competitors.

Many jurisdictions have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties if they are not practicing the patented technology. In addition, some countries limit the enforceability of patents against third parties, including government agencies. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations, and prospects may be adversely affected. Patent protection must be maintained on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain jurisdictions or countries, and we will not have the benefit of patent protection in such jurisdictions or countries.

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

We may in the future be subject to claims that former employees, consultants, or other third parties have an interest in our patents or other intellectual property as an inventor, co-inventor, or owner of trade secrets. Although it is our policy to require our employees and consultants who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who conceives or develops intellectual property that we regard as our own or such party may breach the assignment agreement. We may have disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to obtain ownership or to defend against claims challenging inventorship. If we or our licensors fail in any such litigation, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property or other proprietary information. Such an outcome could have a material adverse effect on our business. Even if we or our licensors are successful in defending against such claims, litigation could result in substantial costs and be a distraction to our management and other employees, and such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

The lives of our patents may not be sufficient to effectively protect our products and business.

Although various extensions may be available, the life of a patent, and the protection it affords, is limited. In most countries including the United States, the natural expiration of a patent is generally 20 years after its first effective filing date. Our chRDNA genome-editing patents will expire in 2036, without any patent term extension. Even if patents covering our product candidates are obtained, once the patent life has expired for a product we may be open to competition from biosimilar or generic medications. In addition, although upon issuance in the United States the life of a patent can be increased based on certain delays caused by the USPTO, called patent term adjustments, or PTA, this increase can be reduced or eliminated based on certain delays caused by us during patent prosecution or if terminal disclaimers are filed over other co-owned patents or patent applications to avoid rejections based on obviousness-type double patenting. If we do not have sufficient patent life to protect our products, our business, financial condition, results of operations, and prospects will be adversely affected.

We may not obtain patent term extension, or PTE, for any product candidates we develop.

Depending upon the timing, duration, and specifics of any FDA marketing approval of any product candidates we develop, our U.S. patents may be eligible for limited PTE under the Drug Price Competition and Patent Term Restoration Action of 1984, or Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during clinical trials and the FDA regulatory review process. A PTE cannot extend the remaining term of a patent beyond a total of 14

years from the date of product approval, only one patent may be extended, and only a patent with claims covering the approved biologic, a method for its approved indication, or a method for manufacturing it may be extended. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the clinical phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy the applicable requirements. Moreover, we may not receive PTE or we may receive less time than we requested. If we are unable to obtain PTE or if the term of any such PTE is less than we request, we will be unable to rely on our patent position to forestall the marketing of competing products following our patent expiration, and our business, financial condition, results of operations, and prospects could be materially harmed.

Changes to the patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our genome-editing technologies and product candidates.

Patent reform legislation in the United States and other countries, including the Leahy-Smith America Invents Act, or Leahy-Smith Act, signed into law on September 16, 2011, and its implementation could increase the uncertainties around patent protection, costs, and the enforcement or defense of our patents, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. The Leahy-Smith Act included a number of significant changes to U.S. patent law. Such provisions affect the way patent applications are prosecuted, redefine prior art, and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. In addition, the Leahy-Smith Act transformed the U.S. patent system from a first-to-invent to a first-to-file system, effective on March 16, 2013. For small companies, such as ours, this means that we must file our patent applications earlier in our development process rather than relying on proving priority of invention and it is now easier and less costly for third parties to attack our patents, all of which could harm our business, financial condition, results of operations, and prospects.

There is uncertainty regarding the patentability of certain inventions in the biotechnology and pharmaceutical areas. Recent decisions by the U.S. Supreme Court have either narrowed the scope of patent protection available in certain circumstances or weakened the rights of patent owners in particular situations. For example, in *Association for Molecular Pathology v. Myriad Genetics, Inc.*, the Supreme Court ruled that a "naturally occurring DNA segment is a product of nature and not patent eligible merely because it has been isolated," and invalidated Myriad Genetics' claims on isolated *BRCA1* and *BRCA2* genes. To the extent that our claims relate to naturally occurring antibodies or proteins, these may be deemed to be directed to natural products or to lack an inventive concept above and beyond an isolated natural product, and a court may decide the claims are invalid under *Myriad*. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO, and the relevant law-making bodies, as well as courts and patent offices in other countries, the laws and regulations governing patents could change in unpredictable ways that may weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future, which could have a material adverse effect on our existing patent portfolio and those of our licensors. Europe's planned Unified Patent Court may present uncertainties for our ability to protect and enforce our patent rights against competitors in Europe. Although this new court is being implemented to provide more certainty and efficiency to patent enforcement throughout Europe, it will also provide our competitors with a new forum to use to centrally challenge our patents, rather than having to seek invalidity or non-infringement decisions on a country-by-country basis. Once the Unified Patent Court is established, it will be several years before the scope of patent rights that will be recognized and the strength of patent remedies that will be provided is known.

Third-party claims of intellectual property infringement may prevent or delay our ability to commercialize our product candidates.

The fields of genome editing and CAR-T and CAR-NK cell therapies are relatively new. No genome-edited products have been commercialized and there is ongoing patent litigation in the autologous CAR-T cell therapy space. Due to the widespread research and development that is taking place in these fields, including by us and our competitors, the intellectual property landscape is in flux and may remain uncertain for the

foreseeable future. There may be significant litigation and administrative proceedings that could affect our genome-editing technologies and product candidates.

Our commercial success depends upon our ability to develop, manufacture, market, and sell product candidates that we may develop or license and to use our proprietary technologies without infringing, misappropriating, or otherwise violating the intellectual property rights of third parties. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. As industry, government, academia, and other biotechnology and pharmaceutical research expands and more patents are issued, the risk increases that our genome-editing technologies or product candidates may give rise to claims of infringement of the patent rights of others. We cannot guarantee that our genome-editing technologies, current and future product candidates, or the use or manufacture of such product candidates will not infringe third-party patents. There may be third-party patents of which we are currently unaware with claims to compositions, methods of manufacture, or methods of use or treatment that cover product candidates we will discover and develop. It is possible that we may fail to identify relevant third-party patents or applications. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Thus, we cannot be certain that we were the first to file any patent application related to our genome-editing technologies or product candidates. Furthermore, patent rights are granted jurisdiction-by-jurisdiction, and our freedom to practice certain genome-editing technologies, including our ability to research, develop, and commercialize our product candidates, may differ by country.

Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields of CRISPR genome editing as well as the field of immuno-oncology, including those relating to CAR-T and CAR-NK cell therapies and their methods of use. Our CB-010 product candidate, which is an allogeneic anti-CD19 CAR-T cell therapy for the treatment of relapsed or refractory B-NHL, uses Cas9 chRDNAs to insert the CD19-specific CAR into the T cell genome and for an additional edit. Numerous parties have intellectual property around RNA-guided Cas9 genome editing. Our CB-011 product candidate, which is an allogeneic anti-BCMA CAR-T cell therapy to treat relapsed or refractory MM, and our CB-012 product candidate, which is an allogeneic anti-CD371 CAR-T cell therapy to treat relapsed or refractory AML, both use Cas12a chRDNAs to insert the CAR into the T cell genome and to make additional edits.

We are aware of certain third-party patents relating to CRISPR-Cas12a RNA-guided genome-editing systems, relevant methods of editing immune cells, and related intellectual property that may cover and be asserted against our product candidates. For example, our CB-011 product candidate is an allogeneic anti-BCMA CAR-T cell therapy, and we are aware of third-party patents that claim anti-BCMA CARs as well as nucleic acids encoding such CARs, vectors comprising these nucleic acids, and host cells expressing such CARs. We have not, at this stage, performed any freedom-to-operate analyses on our product candidates to identify potential infringement risks, and we may not be aware of other issued patents that a third party might assert are infringed by our product candidates. Furthermore, we are aware of ongoing litigation over various CAR constructs and, depending upon the outcome of such litigation, we may infringe third-party patents that survive such litigation. If we are unable to secure and maintain freedom to operate with respect to the patents that we are aware of and any other patents that are asserted against our product candidates, others could preclude us from commercializing our product candidates, including CB-010, CB-011, CB-012, and CB-020.

Under U.S. patent laws, conducting clinical trials and seeking regulatory approval in the United States for therapeutic products are generally not considered an act of infringement, and similar exemptions are present in other countries. Nevertheless, third parties may allege that the act of filing our BLA or conducting clinical trials is outside of the safe harbor provision for activities reasonably related to the development and submission of information to the FDA for regulatory approval, and third parties may, upon our regulatory filing, assert infringement claims based on existing patents or patents that may be issued prior to our filing, regardless of the merit of such claims. Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, ownership,

or priority. A court of competent jurisdiction could hold that these third-party patents are valid, enforceable, and infringed, which could materially and adversely affect our ability to commercialize any product candidates we may develop and any other product candidates or technologies covered by the asserted third-party patents. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such patent, there is no assurance that a court of competent jurisdiction would invalidate the patent.

If any third-party patents were held by a court of competent jurisdiction to cover our genome-editing technology used in the manufacturing of our product candidates or any product candidate itself or its indication, the holders of any such patents may be able to block our ability to commercialize the product candidate unless and until we obtained a license under the applicable patents, or such patents expire, or are held to be not infringed, unpatentable, invalid, or unenforceable. We may not be able to obtain a license to the blocking patents, or the terms of the license may not be commercially viable. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same intellectual property licensed to us, and it could require us to make substantial upfront, milestone, and royalty payments. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, or at all, our ability to commercialize our product candidates may be blocked or delayed, which could in turn significantly harm our business.

We could also be forced, including by court order, to cease manufacturing and commercializing any infringing product candidates. In addition, we could be found liable for significant monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed the third-party patent. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar material adverse effect on our business, financial condition, results of operations, and prospects. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of our management time and resources from our business.

We may be involved in lawsuits or other proceedings to enforce or protect our patents, the patents of our licensors, or our other intellectual property rights, which could be expensive, time-consuming, and unsuccessful.

Competitors may infringe our patents or our licensors' patents or challenge the validity of our or our licensors' patent rights. Even if our patents are unchallenged, they may not adequately prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by our patents and patent applications to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our or their ability to commercialize, our product candidates.

Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time-consuming and likely to divert significant resources from our core business, including distracting our management and scientific personnel from their normal responsibilities and generally harm our business. Additionally, a defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Thus, suing a third party for patent infringement puts our patents at risk and we may choose not to take such actions, thus allowing a competitor to infringe our patents. Grounds for a validity challenge in a counterclaim could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Thus, a court may decide that one or more of our patents is not valid or is unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put one or more of our pending patent applications at risk of not issuing, all of which could

negatively impact our business. Even if we establish infringement in a legal proceeding against a third party, the court may decide not to grant an injunction against further infringing activity by the defendant and may only award money damages, which may or may not be an adequate remedy for us depending on the circumstances. Furthermore, because of the substantial amount of discovery required in connection with U.S. patent litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation.

Third parties may also raise similar claims of invalidity before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include *inter partes* review, or IPR, *ex parte* reexamination, and post grant review in the United States, and equivalent proceedings in foreign jurisdictions, including opposition proceedings before the European Patent Office, or EPO. Such proceedings could result in revocation or amendment to our patents, which potentially could result in our patents no longer protecting our genome-editing technologies or our product candidates. Such a loss of patent protection could have a material adverse impact on our business.

We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. There can be no assurance that we will have sufficient financial or other resources for such litigation or proceedings, which may continue for several years. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing or misappropriating or successfully challenging our intellectual property rights. In addition, if securities analysts or investors perceive litigation results to be negative, it could have a substantial adverse effect on the price of our common stock. There could be public announcements of the results of litigation or patent challenge hearings, motions, or other interim proceedings or developments, which also could affect the price of our stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, or distribution activities. Any of the foregoing could allow third parties to develop and commercialize competing technologies and products and have a material adverse impact on our business, financial condition, results of operations, and prospects.

Our product candidates are biologics, and as such, we may enter into a settlement agreement with a biosimilar manufacturer seeking to market a product highly similar to our product; such a settlement agreement may be reviewed by the Federal Trade Commission, or FTC, and such review could result in a fine or penalty and substantial expense.

The FTC reviews patent settlement agreements between biologics companies and biosimilar manufacturers to evaluate whether these agreements include, among other things, anti-competitive reverse payments that slow or defeat the introduction of lower-priced medicines, including biosimilars. If we are faced with an FTC challenge of a settlement agreement with a biosimilar manufacturer, such challenge could impact how or whether we settle the case and, even if we strongly disagree with the FTC's position, we could face a penalty or fine and substantial expense. Any litigation settlements we enter into with biosimilar manufacturers could also be challenged by third parties adversely affected by the settlement. These kinds of follow-on lawsuits, which may be class action suits, can be expensive and can continue over multiple years. If we were to face lawsuits of this nature, we may not be successful in defeating these claims and we may, therefore, be subject to large payment obligations, which we may not be able to satisfy in whole or in part.

Our rights to develop and commercialize our product candidates are subject to the terms and conditions of our licenses and assignments with third parties, and if we fail to comply with our obligations under these agreements, we could lose intellectual property rights and be subject to litigation from our licensors or assignors.

We license, or have taken assignment to, patents related to certain of our product candidates and genome-editing technologies from third parties. These licenses and assignments typically impose obligations on us, including diligence and payment obligations. If we fail to comply with our obligations under these

agreements, our licensors and assignors may have the right to terminate our agreements, in which event we would not be able to commercialize any product that is covered by the patent rights at issue. Additionally, we may be subject to litigation for breach of these agreements. Moreover, if disputes over intellectual property that we have licensed, or taken assignment of, prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the product candidates or technologies covered by such patents, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects. In addition, intellectual property rights that we license in the future may include sublicenses under intellectual property owned by third parties, in some cases through multiple tiers. The actions of our licensors may therefore affect our rights to use our sublicensed intellectual property, even if we are in compliance with all of the obligations under our license agreements. Should our licensors or any of the upstream licensors fail to comply with their obligations under the agreements pursuant to which they obtain the rights that are sublicensed to us, or should such agreements be terminated or amended, our ability to develop and commercialize our product candidates may be materially harmed.

Our chRDNA genome-editing patent family was developed under a three-year research collaboration between us and Pioneer Hi-Bred International, Inc. (now Corteva Agriscience), or Pioneer. Initially, this patent family was owned by Pioneer under the terms of the Amended and Restated Collaboration and License Agreement dated July 13, 2015, with Pioneer (then a DuPont company), or the Pioneer Agreement, and Pioneer granted us an exclusive license to the chRDNA patent family in the fields of human and animal therapeutics and research tools as well as a non-exclusive license in certain other fields outside a Pioneer field which consists of certain agricultural crops, specified microorganisms, a defined industrial bio field, and certain nutrition and health applications, which Pioneer field is known as the Pioneer Exclusive Field. Through an amendment to the Pioneer Agreement, dated December 18, 2020, Pioneer assigned the chRDNA patent family to us in exchange for an upfront payment and potential future milestones. As part of this amendment, Pioneer also granted a covenant not to sue for our licensees of our chRDNA technology under certain other Pioneer intellectual property (to which we already have a license that, in this situation, we cannot sublicense to licensees of our chRDNA technology in the field of human therapeutics) that might cover our chRDNA genome-editing technology, provided that we make the required payments. Thus, if we do not make such payments, our licensees could be sued by Pioneer, which could result in our licensees suing us for breach of contract.

Additionally, under the Pioneer Agreement, we licensed certain Pioneer background CRISPR-Cas9 intellectual property, particularly a patent family owned by Vilnius University and exclusively licensed to Pioneer, that we have sublicensed to several third parties as part of our CRISPR-Cas9 out-licensing program. Although the Vilnius patent family does not cover our chRDNA genome-editing technology or product candidates, if we were to materially breach the Pioneer Agreement and not cure such breach, Pioneer could terminate the Pioneer Agreement, which would expose us to possible lawsuits from a number of our sublicensees to the Vilnius University patent family.

For our CB-011 product candidate, an allogeneic anti-BCMA CAR-T cell therapy, we took assignment of an anti-BCMA single-chain variable fragment, or scFv, from ProMab Biotechnologies, Inc., or ProMab, under a Sales and Assignment Agreement, dated January 31, 2020, or the ProMab Agreement, as amended. Although we own the patent family that covers this scFv and its methods of use, in the event that we materially breach, and do not cure, the ProMab Agreement, ProMab could terminate the agreement and we would be required to immediately cease any and all manufacture, sale, offer for sale, use, import, or export of products comprising the anti-BCMA scFv (provided that, if our product is approved for commercial sale, we may sell any remaining existing inventory of such products for a short period of time). If this were to happen prior to regulatory approval, we would not be able to continue the development of CB-011, and if this were to happen after regulatory approval, we would lose all future revenues from CB-011.

The scFv in our CB-012 product candidate, an allogeneic anti-CD371 CAR-T cell therapy, is exclusively licensed to us in this field by Memorial Sloan Kettering Cancer Center, or MSKCC. To maintain the license, we are required to pay annual license fees and to meet certain diligence milestones within specified

periods of time. We may extend these periods by a certain number of months upon payment of additional fees. In the event that we materially breach, and do not cure, the Exclusive License Agreement we entered into with MSKCC on November 13, 2020, or the MSKCC Agreement, MSKCC may terminate the MSKCC Agreement, in which case we would not be able to continue the development of CB-012.

Thus, we are reliant upon the above licenses to and assignments of certain intellectual property from third parties that is important or necessary to the development of our genome-editing technologies and product candidates. In spite of our best efforts, our licensors or assignors might conclude that we have materially breached our license or assignment agreements, respectively, and might terminate these agreements, thereby removing our ability to develop and commercialize products and technology covered by the agreements. To the extent such third parties fail to meet their obligations under these agreements, which we are not in control of, we may lose the benefits of the agreements. If these agreements are terminated, or if the underlying patents fail to provide the intended exclusivity, competitors could have the freedom to seek regulatory approval of, and to market, products identical to ours. Any of these events could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

Disputes may arise with the third parties from whom we license or take assignment of our intellectual property rights from for a variety of reasons, including:

- the scope of rights granted under the license or assignment agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on, or derive from, intellectual property of the licensor that is not subject to the license or assignment agreement and is not covered by a covenant not to sue;
- the sublicensing of rights and the obligations to our licensors associated with sublicensing;
- our diligence obligations under license or assignment agreements and what activities satisfy those diligence obligations; and
- whether payments are due and when.

We may not be successful in obtaining or maintaining necessary rights to any future product candidates that we acquire through acquisitions or in-licenses.

Our future programs may involve additional product candidates that may require the use of intellectual rights held by third parties, and the growth of our business could depend, at least in part, on our ability to acquire or in-license these proprietary rights. We may be unable to acquire or in-license intellectual property rights from third parties that we identify. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, which would harm our business. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license other product candidates. We may need to cease development of a future product candidate covered by such third-party intellectual property rights.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and companies that may be more established or have greater resources than we do may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to develop product candidates. More established companies may have a competitive advantage over us due to their size, cash resources, and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third party

intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates or new genome-editing or other technologies that we may seek to acquire. If we are unable to successfully obtain rights to required third party intellectual property rights, we may not be able to expand our product pipeline, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Our ability to continue to receive licensing revenues and to enter into new licensing arrangements related to the CRISPR-Cas9 CVC IP will be substantially impaired if the CVC IP is limited by administrative patent proceedings.

We have an exclusive license from The Regents of the University of California, or UC, and the University of Vienna, or Vienna, in all fields to a foundational CRISPR-Cas9 genome-editing patent family, the CVC IP, having as inventors Drs. Jennifer A. Doudna, Emmanuelle Charpentier, Martin Jinek, and Krzysztof Chylinski. We have entered into over 20 sublicenses, both exclusive and non-exclusive, to this CRISPR-Cas9 intellectual property in combination with licenses to our own Cas9 intellectual property (and sometimes in combination with a sublicense to the Vilnius Cas9 patent family we licensed from Pioneer) in a variety of fields (*e.g.*, human cell therapy, microbial applications, agriculture, livestock, industrial biotechnology, nutrition and health, research reagents and services, forestry, transgenic animal models, internal research, etc.). Under the Exclusive License for Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription we entered into with UC and Vienna on April 16, 2013, or the UC/Vienna Agreement, we are required to perform certain diligence activities, all but one of which we have timely achieved. We are currently in negotiations with UC/Vienna to extend the time period in which we must achieve this last milestone. We are also required to share with UC/Vienna a percentage of sublicensing revenue we receive including cash and equity. These sublicense agreements are an important source of revenues for us while we are developing our own product candidates. Furthermore, we must reimburse UC/Vienna for the patent prosecution and maintenance costs associated with the CVC IP, which are substantial in light of all the disputes outlined below.

The CVC IP that we have exclusively licensed from UC/Vienna is co-owned with Dr. Charpentier, and Dr. Charpentier has not granted us any rights to the CVC IP, either directly or indirectly. On December 15, 2016, we entered into a Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement, or IMA, with UC, Vienna, Dr. Charpentier, CRISPR Therapeutics AG (the exclusive licensee of Dr. Charpentier in the field of human therapeutics), ERS Genomics Ltd (the exclusive licensee of Dr. Charpentier in all fields outside human therapeutics), and Intellia, our exclusive licensee in a defined field of human therapeutics. Under the IMA, the co-owners provided reciprocal worldwide cross-consents to each of the other co-owners' existing licensees and sublicensees as well as future licensees and sublicensees, with no accounting to the other owners. The IMA includes a number of other commitments and obligations with respect to supporting and managing the CVC IP, including a cost-sharing agreement. In the United States, each co-owner has the freedom to license and exploit the technology. As a result, although our license from UC/Vienna is exclusive, we do not have any rights from Dr. Charpentier and thus our license to the CVC IP from UC/Vienna is non-exclusive with respect to such co-owned rights. Furthermore, in the United States, each co-owner is required to be joined as a party to any claim or action we may wish to bring to enforce those patent rights. Although we have entered into the IMA, which provides for, among other things, notice of and coordination in the event of third-party infringement of the patent rights within the CVC IP, there can be no assurance that all parties will cooperate in any future infringement. In addition, the parties to the IMA may dispute certain provisions and the resolution of any contract interpretation disagreement could increase what we believe to be our financial obligations to UC/Vienna.

The CVC IP is, and has been, the source of several disputes in the USPTO, the EPO, and other patent offices. At the time the CVC IP was first filed (May 25, 2012), the United States was under a first-to-invent patent system; thus, if two or more patent applications or one or more patents and one or more patent applications claimed the same invention, the USPTO would determine the inventorship. Specifically, the Broad Institute Inc. and Massachusetts

Institute of Technology and, in some instances, the President and Fellows of Harvard College, which we refer to individually and collectively as the Broad, owns a patent family (having an earliest filing date of December 12, 2012) that includes issued patents in the United States and Europe that claim certain aspects of CRISPR-Cas9 systems to edit DNA in eukaryotic (*i.e.*, plant and animal) cells, including human cells. In January 2016, the Patent Trial and Appeal Board, or PTAB, of the USPTO declared an interference (Interference No. 106,048, or the ’048 interference) between one of the then-pending U.S. patent applications (now U.S. Patent No. 10,266,850) included in the CVC IP and 12 issued U.S. patents owned jointly by the Broad to determine which set of inventors invented first and, thus, was entitled to patents on the invention in the United States. The PTAB concluded at the end of the motions phase that the declared interference should be discontinued (and not progress to the priority phase) because the involved claim sets were considered patentably distinct from each other. Following appeal by the CVC group, in September 2018, the U.S. Court of Appeals for the Federal Circuit, or CAFC, affirmed the PTAB’s decision to terminate the interference proceeding without determining which inventors actually invented the use of the CRISPR-Cas9 genome-editing technology in eukaryotic cells. In June 2019, the PTAB declared another interference (Interference No. 106,115, or the ’115 interference) between 14 pending U.S. patent applications in the CVC IP and 13 patents and a patent application co-owned by the Broad. The Broad patents include those that were the subject of the ’048 interference. In September 2020, the PTAB issued an order that, among other matters, advanced the proceeding to the priority phase, where the CVC group has the burden of proof to show that it was first to invent. The priority phase is nearly complete and we expect the PTAB to schedule a hearing and issue a decision in 2021. The PTAB’s decision may be appealed to the CAFC.

In addition to the Broad, ToolGen, Inc., MilliporeSigma (a subsidiary of Merck KGaA), and Harvard University, each filed patent applications claiming CRISPR-Cas9-related inventions after the CVC IP was first filed (October 23, 2012 in the case of ToolGen patent family; December 6, 2012 in the case of the MilliporeSigma patent family; and December 17, 2012 in the case of the Harvard University patent family) and have alleged (or may allege) that they invented one or more of the inventions claimed in the CVC IP before the CVC inventors did. If the USPTO deems the scope of the claims of one or more of these parties to sufficiently overlap with the allowable claims from the CVC IP, the PTAB may declare additional interference proceedings to determine the actual inventor of such claims. In December 2020, the PTAB declared an interference (Interference No. 106,127, or the ’127 interference) between a ToolGen patent application that claims certain aspects of CRISPR-Cas9 systems to edit DNA in eukaryotic cells, including human cells, and the same 14 pending U.S. patent applications in the CVC IP that are involved in the ’115 interference. This interference is currently in the motions phase. Additionally, the PTAB declared an interference (Interference No. 106,126) at the same time between the same ToolGen patent application and the Broad patents and patent application in the ’115 interference. In June 2021, the PTAB declared an interference (Interference No. 106, 132) between a MilliporeSigma patent application that claims methods for using CRISPR-Cas9 systems to edit DNA in eukaryotic cells, including human cells, and the same 14 pending U.S. applications in the CVC IP that are involved in the ‘115 and ‘127 interferences. Also in June 2021, the PTAB declared an interference (Interference No. 106,133) between the same MilliporeSigma patent application and the Broad patents and patent applications in the ‘115 and ‘126 interferences. Opposition proceedings in the EPO have been initiated against patents owned by the Broad, ToolGen, and MilliporeSigma, and various third parties have opposed the three issued CVC European patents. Opposition proceedings can lead to the revocation of a patent in its entirety, the maintenance of the patent as issued, or the maintenance of a patent in amended form, and opposition proceedings and appeals therefrom typically take years to resolve. These CRISPR-Cas9 patents are expected to expire in 2033.

In light of the uncertainty surrounding the CVC IP, certain third parties have negotiated royalty-stacking provisions in their sublicenses with us whereby they can deduct from what they owe to us a certain percentage of royalties they pay to other parties with CRISPR-Cas9 patents (such as to the Broad). Furthermore, other third parties have adopted a “wait and see” approach and are not entering into license agreements with us or third parties until all of the uncertainty surrounding inventorship and priority among the groups with CRISPR-Cas9 patents is resolved. In the event that patents in the CVC IP are invalidated, certain of our sublicensees may wish to renegotiate their license agreements with us, or may terminate for convenience. If this happens prior to commercialization of our own product candidates, we could lose a source of revenues while still remaining responsible for reimbursing UC for costs of prosecuting and maintaining the remaining CVC IP.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position will be harmed.

In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce, and any other elements of our product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by patents. Trade secrets and know-how can be difficult to protect.

We seek to protect these trade secrets and other proprietary technology, in part, by entering into non-disclosure or confidentiality agreements with parties who have access to them, such as our employees, collaborators, CMOs, CROs, clinical trial site personnel and investigators, consultants, and other third parties. We also enter into confidentiality and invention assignment agreements with our employees and our agreements with consultants include invention assignment obligations. We seek to preserve the integrity and confidentiality of our data, know-how, and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. Although we have confidence in these individuals, organizations, and systems, agreements or security measures may be breached, and we may not have adequate remedies for such breaches. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. We cannot guarantee that our trade secrets and other proprietary and confidential information will not be disclosed or that competitors will not otherwise gain access to our trade secrets.

Despite these efforts, any of these parties may breach agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, some courts both within and outside the United States may be less willing or unwilling to protect proprietary information and trade secrets. If a competitor lawfully obtains or independently develops any of our trade secrets, we will have no right to prevent such competitor from using such information to compete with us, which could harm our competitive position. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, or misappropriation of our intellectual property by third parties, we may not be able to establish or maintain a competitive advantage in our markets, which could materially adversely affect our business, operating results, financial condition, and prospects. Additionally, it is possible that our genome-editing technology platform, our trade secrets, and our know-how will over time be disseminated within the industry through the publication of journal articles and the movement of personnel from our company into academia or into other companies that may be our competitors.

Furthermore, others may independently discover our trade secrets and proprietary information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that we may consider to be trade secrets or other proprietary information, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position would be materially and adversely harmed.

Intellectual property rights do not necessarily address all potential competitive threats.

The degree of future protection afforded by our intellectual property rights, whether through patents or trade secrets, is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make, use, and sell cell therapy products that are similar to our product candidates without infringing our intellectual property rights;

- others may independently develop similar or alternative genome-editing technologies without infringing our intellectual property rights;
- we may not develop additional proprietary technologies that are patentable;
- others may misappropriate our trade secrets, or independently develop or acquire our trade secrets lawfully; and
- our patents may have expired, whether or not patent term extension was granted.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If our trademarks are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

If our trademarks are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected. Our unregistered trademarks may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our unregistered trademarks. Over the long term, if we are unable to successfully register our trademarks and establish name recognition based on our trademarks, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, domain names, copyrights, or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our business, financial condition, results of operations, and prospects.

Risks Relating to Our Relationships with Third Parties

We rely on third parties to supply the materials for, and the manufacturing of, our clinical supplies, and we may continue our reliance on third parties for manufacturing of our commercial products, if approved.

We currently do not have clinical-scale manufacturing capabilities, nor do we have any immediate plans to develop such capabilities; thus, we must rely on third-party contract manufacturing organizations, or CMOs, to manufacture clinical supplies for our product candidates. We currently rely on five different CMOs to supply materials to an additional CMO who manufactures the necessary CB-010 cell therapy product candidate materials for our ANTLER phase 1 clinical trial and we are engaging multiple suppliers and CMOs, and anticipate that we will need to engage additional suppliers and CMOs, for our clinical trials with our CB-011 and CB-012 product candidates as well.

We receive the chRDNA guides used for genome editing from one CMO, the Cas protein (Cas9 in the case of CB-010) from another CMO, the virus used to insert the CAR into the T cell genome from another CMO located outside the United States, and our healthy donor cells from two different sources owned by the same third party supplier. The virus CMO receives plasmid from another supplier used in the manufacture of the viral material. Another CMO uses all of these materials to manufacture the CAR-T products for our CB-010 clinical trial. Coordination is essential to ensure that the various materials are received by the CMO manufacturing the T cell products in time, and in the correct amounts, for manufacturing runs. The manufactured CAR-T products then undergo a series of release testing. There can be no assurance that we will not experience supply or manufacturing issues in the future; particularly, given our reliance on single-source suppliers, some of which are

small companies with limited resources and experience to support clinical, and ultimately commercial, products. We cannot ensure that these suppliers will remain in business or that they will not be purchased by one of our competitors or another company that is not interested in continuing to produce these materials for our intended purposes. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier or CMO. The time and effort to qualify a new supplier or CMO, including to meet any regulatory requirements for such qualification, could result in additional costs, diversion of resources, or reduced manufacturing yields, any of which would negatively impact our operating results. Furthermore, we may be unable to enter into agreements with a new supplier on commercially reasonable terms, which could have a material adverse impact on our business, financial condition, results of operations, and prospects.

If our CMOs and suppliers cannot successfully manufacture materials that conform to our specifications and the strict regulatory requirements of the FDA or other regulatory authorities, they will not be able to secure or maintain regulatory approval for their manufacturing facilities. In addition, we have no direct control over the ability of our CMOs and suppliers to maintain adequate quality control, quality assurance, and corresponding maintenance of records and documents, or to hire and retain trained personnel. If the FDA or a foreign regulatory authority inspects these third-party facilities for compliance with regulations for the manufacture of materials or product candidates and, if these facilities fail inspection and cannot adequately correct deficiencies, we may need to find alternative CMOs, which would significantly impact our ability to develop and obtain regulatory approval for our product candidates, and if approved, to market our products. In addition, if our CMOs and suppliers are unable to timely perform or have operations temporarily halted as a result of inspection or enforcement actions taken by the FDA or other regulatory authorities, or as a result of the COVID-19 pandemic, we may experience manufacturing delays or delays in receiving healthy donor cells used in manufacturing our CB-010 product candidate or may need to find alternative CMOs or suppliers, which in each case would significantly impact our ability to develop, obtain regulatory approval for, and market our product candidates, if approved.

We do not yet have sufficient information to reliably estimate the cost of the commercial manufacturing of our product candidates, and the actual cost to manufacture and process our product candidates could materially and adversely affect the commercial viability of our product candidates. Our product candidates have not been manufactured at commercial scale, may not be able to achieve commercial manufacturing, and we may be unable to create a product inventory necessary to satisfy demands for any of our product candidates following approval. As a result, we may never be able to develop a commercially viable product.

In addition, our current reliance on a limited number of CMOs and suppliers exposes us to a variety of risks, each of which could delay our preclinical studies, clinical trials, the approval, if any, of our product candidates by the FDA or foreign regulatory authorities, or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue. Such risks include:

- our CMOs and suppliers may be unable to timely manufacture our product candidates or produce the quantity and quality required to meet our preclinical, clinical, and commercial needs, if any;
- our CMOs and suppliers may not be able to execute our manufacturing procedures appropriately;
- our CMOs and suppliers have their own proprietary methods, which we may not have access to in the event we wish to, or are required to, switch CMOs or suppliers. Additionally, we may not own, or may have to share, the intellectual property rights to any improvements made by our CMOs in the manufacturing process for our product candidates;
- our CMOs and suppliers may not perform as agreed or may not remain in business for the time required to supply our clinical trials or to successfully manufacture, store, and distribute our commercial products;
- our CMOs and suppliers could breach or terminate their agreements with us;

- we face competition for supplies from other gene and cell therapy companies, which may make it difficult for us to secure materials or the testing of such materials on commercially reasonable terms or in a timely manner;
- our CMOs may fail to adequately store the various components received from our suppliers and any damage or loss of such materials could materially impact our ability to manufacture and supply our product candidates;
- we rely on third parties to perform release tests on our product candidates prior to delivery to clinical trial sites. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm;
- we may be unable to identify additional CMOs or suppliers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA or foreign regulatory authorities may have questions regarding any replacement CMO or supplier. This may require new testing and regulatory interactions. In addition, a new CMO would have to be educated in, or develop substantially equivalent processes for, production of our product candidates; and
- as a result of the current COVID-19 pandemic, our CMOs and suppliers may experience production delays and shutdowns.

Our CMO that supplies the virus we use to insert the CAR into our CB-010 CAR-T product candidate is located outside the United States. To date, our virus CMO has not been audited by the FDA, but it has received the cGMP certification for the manufacture of recombinant viral vectors from an EU national regulatory authority. There are additional risks with using an ex-U.S. vendor, including:

- economic weakness, including inflation, or political instability in particular non-U.S. economies and markets;
- difficulties in compliance with non-U.S. laws and regulations;
- changes in non-U.S. regulations and customs, tariffs, and trade barriers;
- changes in non-U.S. currency exchange rates and currency controls;
- trade protection measures, import, or export licensing requirements, or other restrictive actions by U.S. or non-U.S. governments;
- negative consequences from changes in tax laws;
- difficulties in managing international logistics and transportation; and
- workforce uncertainty in countries where labor unrest is more common than in the United States.

For our allogeneic CAR-T product candidates, we rely on receiving healthy donor material to manufacture our product candidates. Variation in quality of donor T cells, and potential challenges in procuring appropriate donor material, could result in insufficient product supply or may result in us being unable to initiate or continue clinical trials on the timelines we expect.

Unlike autologous CAR-T companies, we are reliant on receiving healthy donor material to manufacture our product candidates. Healthy donor T cells vary in quality, and this variation requires us to release batches with the highest integrity based on specifications confirmed by regulatory authorities which makes producing standardized product candidates more likely, but this step may slow the development and commercialization

pathway of those product candidates if releasable batches are not identified sufficiently rapidly. We and our CMOs have developed a screening process designed to enhance the quality and consistency of T cells used in the manufacture of our CAR-T cell product candidates, but our screening process may fail to identify suitable donor material and we may discover failures with the material after production. We may also have to develop new testing methods and update our specifications for new risks, such as screening for new viruses. We have strict specifications for donor material, which include specifications required by regulatory authorities. If we are unable to identify and obtain donor material that satisfy specifications, agree with regulatory authorities on appropriate specifications, or address variability of donor T cells, there may be insufficient material or we may be unable to initiate or continue clinical trials on the timelines we expect, which could harm our reputation and adversely impact our business and prospects. In addition, some third-party suppliers have in the past been unable to secure donor material during the COVID-19 pandemic due to government restrictions on activity and travel, while others were able to provide material. While our suppliers are currently able to provide us with donor material, if the COVID-19 pandemic worsens and our suppliers are unable to secure donor material, we may no longer have sufficient donor material to manufacture our product candidates.

We rely and will continue to rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.

We depend, and will continue to depend, on CROs, clinical trial sites and clinical trial principle investigators, contract laboratories, and other third parties to conduct our ANTLER phase 1 clinical trial for our CB-010 product candidate and future clinical trials for our other product candidates. We will rely heavily on these third parties over the course of our clinical trials, and we control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the protocol and applicable legal, regulatory, and scientific standards and regulations, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with current good clinical practices, or cGCPs, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for the conduct of clinical trials on product candidates in clinical development. Regulatory authorities enforce cGCPs through periodic inspections and for-cause inspections of clinical trial principal investigators and trial sites. If we or any of these third parties fail to comply with applicable cGCP regulations or the protocol, or fail to enroll a sufficient number of patients, we may be required to conduct additional clinical trials to support our marketing applications, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal, state, or foreign fraud and abuse or false claims laws and regulations or healthcare privacy and security laws, or provide us or government agencies with inaccurate, misleading, or incomplete data.

Although we intend to design the clinical trials for our product candidates, our CROs will facilitate and monitor our clinical trials. As a result, many important aspects of our clinical development programs, including site and investigator selection, and the conduct and timing and monitoring of the study, will be partly or completely outside our direct control. Our reliance on third parties to conduct clinical trials will also result in less direct control over the collection, management, and quality of data developed through clinical trials than would be the case if we were relying entirely upon our own employees. Communicating with third parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities.

Any third parties conducting our clinical trials are not, and will not be, our employees and, except for remedies available to us under our agreements with such third parties, we cannot control whether they devote sufficient time and resources to our ongoing preclinical, clinical, and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements, or if there are other difficulties with such third parties, such as staffing difficulties, changes in priorities, or financial distress, our clinical trials may be extended, delayed, or

terminated. As a result, we may not be able to complete development of, obtain regulatory approval of, or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenue could be delayed.

If any of our relationships with trial sites, or any CRO that we may use in the future, terminates, we may not be able to timely enter into arrangements with alternative trial sites or CROs, or do so on commercially reasonable terms. Switching or adding clinical trial sites or CROs to conduct our clinical trials involves substantial cost and requires extensive management time, training, and focus. In addition, there is a natural transition lag when a new third party must learn about our product candidates and protocols, which can result in delays that may materially impact our ability to meet our desired clinical development timelines.

We also are required to register certain ongoing clinical trials and post the results of completed clinical trials on a U.S. government-sponsored database, *www.ClinicalTrials.gov*, within certain timeframes. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions. Our ANTLER phase 1 clinical trial for our CB-010 product candidate is posted on *www.ClinicalTrials.gov*. For any violations of laws and regulations during the conduct of our preclinical studies and clinical trials, we could be subject to warning letters or enforcement action that may include civil penalties up to and including criminal prosecution.

We may not be able to meet our obligations under the AbbVie collaboration or our own product candidates and pipeline may be delayed in light of our obligations to AbbVie. In addition, we have limited control over the achievement of milestones by AbbVie.

We recently entered into a multi-year collaboration agreement under which we will utilize our Cas12a chRDNA genome-editing and cell therapy technologies to research and develop two new CAR-T cell therapies directed to targets specified by AbbVie. We are responsible for conducting certain preclinical research, development, and manufacturing activities, including assisting in the manufacturing of all phase 1 clinical materials and assisting AbbVie with the preparation and filing of its INDs. We and AbbVie have developed a detailed research plan and budget for the first of the two program slots. The collaboration will involve a substantial number of our employees and resources, although we will be reimbursed by AbbVie for our work on the collaboration. We have not previously undertaken a collaboration of this magnitude and focus. Although we have begun a hiring effort to increase our research and development group, it is not certain that we will be able to rapidly hire new, qualified employees, in which case the work on our pipeline products may be delayed until we are able to increase our staff such that we can meet our obligations under the AbbVie research plan and continue to develop our own product candidates. In addition, our ability to receive significant milestone payments upon AbbVie's achievement of developmental, regulatory, and sales-based milestones is outside our control and is dependent on AbbVie's commercially reasonable efforts to develop, commercialize, and manufacture the licensed collaboration products.

We may form or seek collaborations or strategic alliances in the future for the development and commercialization of one or more of our product candidates or for new product candidates. We may not be successful in such efforts and, even if we do enter into such collaborations, they may not be successful.

Our product candidate development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. To date, we have not partnered with a third party with respect to any of our product candidates. In the future, we may choose to partner one or more of our product candidates. If we are unable to negotiate and enter into partnerships, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market, if approved, and generate product revenue.

If we decide to collaborate with pharmaceutical or biotechnology companies for the development and potential commercialization of any of our product candidates, or new product candidates, we may not be able to negotiate collaborations for such product candidates on a timely basis, on acceptable terms, or at all. We may also be restricted under existing agreements from entering into future collaborations. Collaborations are complex and time-consuming to negotiate and document. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the potential collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the potential collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by FDA or comparable regulatory authorities outside the United States, the potential market for the subject product candidate or candidates, the costs and complexities of manufacturing and delivering such product candidates to patients, the potential of competing biologics or other therapeutic approaches, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The potential collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than one with us for our product candidate or for a new product candidate. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Thus, we may face significant competition in seeking appropriate collaborators.

Furthermore, the terms of any collaborations or other arrangements that we may establish may not be favorable to us. Even if we are able to enter into a collaboration, the following are some of the risks associated with doing so:

- collaborators have significant discretion in determining the efforts and resources that they will apply to collaborations and may not devote sufficient resources to the development, manufacturing, marketing, or sale of collaboration products;
- collaborators may not pursue development and commercialization of any product candidates we may develop or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials, or require further development of a product candidate for clinical testing;
- collaborators may adopt alternative technologies, which could decrease the marketability of our product candidates and genome-editing technologies;
- collaborators may independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours, that may result in the withdrawal of the collaborator support for our collaboration product candidates;
- collaborators with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of our product candidates;
- collaborators may not properly obtain, maintain, enforce, or defend our intellectual property in the event we grant such rights or may use our intellectual property in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or expose us to potential litigation;

- we may lose certain valuable rights under circumstances identified in our collaborations, including if we undergo a change of control;
- disputes may arise between our collaborator and us that may cause the collaborator to act in a manner adverse to us and could result in the delay or termination of the research, development, or commercialization of our product candidates or that result in costly litigation or arbitration that diverts our management's attention and resources;
- collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, if at all. For example, if a collaborator were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program under such collaboration could be delayed, diminished, or terminated; and
- collaboration agreements may be terminated and, if terminated, we may find it more difficult to find a suitable replacement collaborator or attract new collaborators, resulting in a need for additional capital to pursue further development or commercialization of the applicable product candidates we may develop.

We may not realize the benefits of acquired assets or other strategic transactions.

We evaluate various strategic transactions on an ongoing basis. We may acquire other businesses, products or product candidates, intellectual property, or technologies as well as pursue joint ventures or investments in complementary businesses. The success of any future strategic transaction depends on the risks and uncertainties, including:

- unanticipated liabilities related to acquired companies or joint ventures;
- difficulties integrating acquired personnel, technologies, and operations into our existing business;
- retention of key employees;
- diversion of management's time and focus from operating our business to management of strategic alliances or joint ventures or acquisition integration challenges;
- increases in our expenses and reductions in our cash available for operations and other uses;
- disruption in or termination of our relationships with collaborators or suppliers as a result of such a transaction; and
- possible write-offs or impairment charges relating to acquired businesses or joint ventures.

Foreign acquisitions and joint ventures are subject to additional risks, including those related to integration of operations across different cultures and languages, currency risks, potentially adverse tax consequences of overseas operations, and the particular economic, political, and regulatory risks associated with specific countries.

Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We could also incur losses resulting from undiscovered liabilities that are not covered by the indemnification we may obtain from the seller.

If we in-license product candidates or products or acquire businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture. We cannot be certain that, following a strategic transaction or license, we will achieve the results, revenue, or specific net income that justifies the transaction. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses or write-offs of goodwill, any of which could harm our financial condition.

We may be subject to claims that our employees, consultants, or third parties performing services for us have wrongfully used or disclosed confidential information of third parties.

Many of our employees were previously, and our consultants are or were previously, employed at universities or research institutions, or at other biotechnology or pharmaceutical companies. Although we try to ensure that our employees, consultants, and third parties performing services for us do not use the proprietary information or know-how of former employers or other companies in their work for us, we may be subject to claims that we or these individuals have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer or other third party. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to our management and employees.

Risks Relating to Employee Matters, Managing Growth, and Other Risks Relating to Our Business

Our future success depends on our ability to retain key executive officers and to attract, retain, and motivate qualified personnel.

We are highly dependent on the research and development, clinical, operational, legal, financial, and other business expertise of our executive officers, including Rachel E. Haurwitz, Ph.D., our President and Chief Executive Officer; Steven B. Kanner, Ph.D., our Chief Scientific Officer; Barbara G. McClung, J.D., our Chief Legal Officer and Corporate Secretary; and Jason V. O'Byrne, M.B.A., our Chief Financial Officer; as well as other members of our senior leadership team and our scientists. Certain of our scientists have greatly contributed to our intellectual property and are critical as we move our chRDNA technology platform forward. Although we have entered into employment agreements with all of our executive officers, each of them may terminate their employment with us at any time. All of our employees are "at will," which means that any of our employees could leave our employment at any time, with or without notice. We maintain "key person" insurance for Dr. Haurwitz but the amount of insurance is modest. We do not maintain "key person" insurance for any of our other executive officers or employees.

We conduct substantially all of our operations at our facility in Berkeley, California. The San Francisco Bay Area is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in our industry is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms, if at all. Many of the biotechnology companies and research institutions that we compete against for qualified personnel and consultants have greater financial and other resources, different risk profiles, and a longer history in the industry than we do. Recruiting and retaining qualified research, development, manufacturing, regulatory, and clinical personnel is critical to our success. Our success also depends on our ability to continue to attract, retain, and motivate entry-level, mid-level, and senior scientific personnel as well as managers. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies, as well as academic and research institutions, for similar personnel. If we are unable to continue to attract and retain high-quality personnel and consultants, the rate and success at which we can discover and develop product candidates and operate our business will be limited.

To induce employees to remain at our company, in addition to salary and cash incentives, we have provided stock options that vest over time. The value to employees of stock options that vest over time may be significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies.

In addition, we rely on consultants and advisors, including our co-founders and scientific advisory board, or SAB, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors, including Drs. Jennifer A. Doudna and Martin Jinek who are among our founders and who are pioneers in CRISPR genome-editing technology, are not employed by us, may be employed by employers other than us, and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

The inability to recruit or retain certain executive officers, key employees, consultants, or advisors may impede the progress of our research, development, and commercialization objectives and have a material adverse effect on our business, intellectual property, financial condition, results of operations, and prospects.

We will need to develop and expand our company, and we may encounter difficulties in managing this development and expansion, which could disrupt our operations.

As of May 31, 2021, we had 66 full-time employees and one part-time employee, for a total of 67 employees, and we expect to continue to increase our number of employees and the scope of our operations in 2021 and beyond as we seek to advance development, and if successful, commercialization, of our product candidates. To manage our anticipated development and expansion, we must continue to implement and improve our managerial, operational, and financial systems; expand our facilities; and continue to recruit and train additional qualified personnel. Current and future growth imposes significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining, motivating, and integrating additional employees;
- managing our internal development efforts effectively, including clinical trials and FDA or foreign regulatory authority review for our product candidates, while complying with our contractual obligations to third parties; and
- improving our operational, financial and management controls, reporting systems, and procedures.

Also, our management may need to divert a disproportionate amount of its attention away from their day-to-day activities and devote a substantial amount of time to managing these expansion activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. This may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees, and reduced productivity among our remaining employees. The physical expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of our product candidates. If our management is unable to effectively manage this expected expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage the future development and expansion of our company.

Our internal computer systems, or those of our third-party vendors, collaborators, consultants, or third parties performing services for us, may fail or suffer security breaches, which could result in a material disruption of the development of our product candidates and program research, compromise sensitive information related to our business, or prevent us from accessing critical information, potentially exposing us to liability or otherwise adversely affecting our business.

Our internal computer systems and those of our current and any future third-party vendors, collaborators, consultants, and third parties performing services for us, as well as our clinical sites and regulatory authorities, are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, and telecommunication and electrical failures. In addition, the COVID-19 pandemic has intensified our dependence on information technology systems as many of our critical business activities are currently being conducted remotely.

Although we have not experienced any such material system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our product candidate development and our business operations, whether due to a loss of our trade secrets or other proprietary information or other similar disruptions. For example, the loss of clinical trial data from our current or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in the theft or destruction of intellectual property, data, or other misappropriation of assets; financial loss; or otherwise compromise our confidential or proprietary information and disrupt our operations, our competitive position could be harmed, and the further development and commercialization of our product candidates could be delayed.

We could be subject to risks caused by misappropriation, misuse, leakage, falsification, or intentional or accidental release or loss of information maintained in the information systems and networks of our company, our third-party vendors, and clinical sites, including personal information of our employees and, potentially, our clinical study patients, and company and vendor confidential data. In addition, third parties may attempt to penetrate our systems or those of our vendors or fraudulently induce our personnel or the personnel of our vendors to disclose sensitive information in order to gain access to data and systems. We may experience threats to our data and systems, including malicious codes and viruses, phishing, and other cyber-attacks. The number and complexity of these threats continue to increase over time. If a material breach of our information technology systems or those of our vendors occurs, the market perception of the effectiveness of our security measures could be harmed and our reputation and credibility could be damaged. We could be required to expend significant amounts of money and other resources to repair or replace information systems or networks.

In addition, we could be subject to regulatory actions or claims made by individuals and groups in private litigation involving privacy issues related to data collection and use practices and other data privacy laws and regulations, including claims for misuse or inappropriate disclosure of data, as well as unfair or deceptive practices. Although we develop and maintain systems and controls designed to prevent these events from occurring, and we have a process to identify and mitigate threats, the development and maintenance of these systems, controls, and processes is costly and requires ongoing monitoring and updating as technologies change and efforts to overcome security measures become increasingly sophisticated.

Moreover, despite our efforts, the possibility of these events occurring cannot be eliminated entirely. As we outsource more of our information systems to vendors, engage in more electronic transactions with clinical sites and collaborators, and rely more on cloud-based information systems, the related security risks will increase and we will need to expend additional resources to protect our technology and information systems. In addition, there can be no assurance that our internal information technology systems, or those of third parties with which we conduct business, will be sufficient to protect us against breakdowns, service disruption, data deterioration, or loss in the event of a system malfunction, or prevent data from being stolen or corrupted in the event of a cyberattack, security breach, industrial espionage attacks, or insider threat attacks, which could result in financial, legal, business, or reputational harm.

Our employees, clinical trial principal investigators, and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, clinical trial principal investigators, and consultants. Misconduct by these parties could include intentional failures to comply with FDA regulations or the regulations applicable in other jurisdictions, to provide accurate information to the FDA and other regulatory authorities, to comply with healthcare fraud and abuse laws and regulations in the United States and in other jurisdictions, to report financial information or data accurately, or to disclose unauthorized activities to us. Such misconduct could involve the improper use of information obtained in the course of clinical trials or interactions with the FDA or other regulatory authorities, which could result in regulatory sanctions and cause serious harm to our reputation. We may also be subject to federal, state, and foreign laws governing the privacy and security of identifiable patient information. If our operations are found to be in violation of any of these laws that apply to us, we may be subject to significant civil, criminal, and administrative penalties. If we commercialize our products, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing, and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs, and other business arrangements.

We have adopted a code of conduct applicable to all of our employees, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent misconduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from government investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, financial condition, results of operations, and prospects, including the imposition of civil, criminal, and administrative penalties; damages; monetary fines' contractual damages; reputational harm; and curtailment of our operations, any of which could adversely affect our business, financial condition, results of operations, and prospects.

If we fail to comply with environmental, health, and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business; additionally, our business could be shut down until we are in compliance with such laws and regulations.

We are subject to numerous federal, state, and local environmental, health, and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment, and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We contract with third parties for the disposal of these materials and wastes. We will not be able to eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from any use by us of hazardous materials, we could be held liable for any resulting damages. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations. In addition, we may incur substantial costs in order to comply with current or future environmental, health, and safety laws and regulations. These current or future laws and regulations may impair our product candidate development and research program efforts.

Moreover, there is increasing stakeholder pressure on companies to diligence environmental, social, and governance matters in the supply chain. Negative publicity regarding production methods, alleged practices, or workplace or related conditions of any of our suppliers, CMOs, CROs, or third parties who perform services for us could adversely affect our reputation and force us to locate alternatives, which could increase our costs and result in delayed supply of components for, and manufacturing of, our product candidates, or other disruptions to our operations.

Our insurance policies are expensive and only protect us from some business risks, which may leave us exposed to certain uninsured liabilities.

Although we have obtained product liability insurance coverage for our clinical trials, it may not be adequate to cover all expenses or liabilities that we may incur. Furthermore, we anticipate that we will need to increase our insurance coverage if we successfully commercialize any product candidate. Product insurance coverage is increasingly expensive, and we may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. Once, and if, we obtain marketing approval for a product candidate, we intend to acquire product liability insurance coverage for our commercial products; however, we may be unable to obtain such product liability insurance on commercially reasonable terms or in adequate amounts. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. Additionally, we may have to pay amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Many of our license agreements require us to indemnify our licensors or licensees against certain third-party claims; we may not have insurance for such indemnifications or our insurance may be inadequate should any claim arise.

We also expect that operating as a public company will make it more difficult and more expensive for us to maintain and increase our levels of directors' and officers' liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our cash position and results of operations. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees, or as executive officers.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any product candidates that we may develop.

We will face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if such product candidates receive marketing approval and are sold commercially. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing, or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against claims that our product candidates caused injuries, we could incur substantial liabilities. Even a successful defense would require significant financial and management resources. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial patients;
- significant costs to defend the related litigation;
- initiation of investigations by regulators;
- diversion of our management's time and resources;
- substantial monetary awards to clinical trial patients;
- product recalls, withdrawals, or labeling, marketing, or promotional restrictions;

- exhaustion of any available insurance and our capital resources;
- loss of revenue;
- the inability to commercialize any product candidates that we may develop; and
- a decline in our stock price.

As a public company, we are obligated to develop and maintain proper and effective internal controls over financial reporting, and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We will be required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal controls over financial reporting for the fiscal year ending December 31, 2022, which is the year covered by the second annual report following the completion of our initial public offering. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal controls over financial reporting. In addition, our independent registered public accounting firm will be required to attest to the effectiveness of our internal controls over financial reporting in our first annual report required to be filed with the SEC following the date we are no longer an emerging growth company if we are not a non-accelerated filer at such time.

If we are unable to conclude that our internal controls over our financial reporting are effective, or if our independent registered public accounting firm determines we have a material weakness in our internal controls over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities. Failure to remedy any material weakness or significant deficiency in our internal controls over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our effective tax rate may fluctuate, and we may incur obligations in tax jurisdictions in excess of amounts accrued on our financial statements.

In addition to federal income tax, we are subject to taxation in various state and local tax jurisdictions. As a result, our effective tax rate is derived from a combination of applicable tax rates in the locations in which we operate. In preparing our financial statements, we estimate the amount of tax that will become payable in each jurisdiction using rates based on prior experience. Nevertheless, our effective tax rate may be different than what we have experienced in the past due to numerous factors, including the passage of new tax legislation, changes in the mix of our profitability, if any, from jurisdiction to jurisdiction, the results of examinations and audits of our tax filings, our inability to secure or sustain acceptable agreements with tax authorities, and changes in tax laws. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods and may result in tax obligations in excess of amounts accrued in our financial statements.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have generated, and expect to continue to generate in the future, significant federal and state net operating loss, or NOL, carryforwards that are available to offset taxable income in future years, if any. We have also generated, and expect to continue to generate in the future, significant federal and state research and development tax credit carryforwards that are available to potentially offset federal income taxes and state income taxes, respectively, in future years, if any.

Under the Tax Cuts and Jobs Act of 2017, or TCJA, as modified by the Coronavirus Aid, Relief and Economic Security Act, or the CARES Act, our federal NOLs incurred in taxable years beginning after

December 31, 2017 may be carried forward indefinitely. Additionally, for tax years beginning after December 31, 2020, the deductibility of federal NOLs incurred in taxable years beginning after December 31, 2017 is limited to 80% of our taxable income. Also, NOLs incurred in 2018, 2019, and 2020 may be carried back five taxable years. It is uncertain if and to what extent various states will conform to the NOL changes contained in the TCJA and the CARES Act. Federal research and development credit carryforwards may only be carried forward for 20 years and therefore could expire unused. As a result, they may be unavailable to offset future taxes.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, which we refer to as the Tax Code, and corresponding provisions of state law, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50 percentage point change, by value, in its equity ownership by certain stockholders over a rolling three-year period, the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes (such as research and development tax credits) to offset its post-change income or taxes may be limited. A Section 382 analysis was performed for the period June 1, 2012 through March 31, 2021, which concluded that we did not experience any "ownership change" during any rolling three-year period occurring within this period, and we have a full valuation allowance for deferred tax assets, including NOLs. However, the completion of this offering, together with private placements and other transactions that have occurred in the past 36 months, may trigger such an ownership change. Furthermore, we may experience one or more ownership changes in the future as a result of this offering and subsequent shifts in our stock ownership, some of which may be outside our control. In addition, at the state level, there may be periods during which the use of NOL carryforwards is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For example, California recently imposed limits on the use of California state NOLs and tax credits to offset California taxable income in years beginning after 2019 and before 2023. If an ownership change occurs and we earn taxable income in future years, the limitation on our ability to use our NOLs and other tax attribute carryforwards could adversely affect our future operating results by increasing our future income tax liabilities.

The COVID-19 pandemic may in the future adversely impact our business, financial condition, and results of operations, including our preclinical studies and clinical trials, and may cause substantial disruption in the financial markets and adversely impact economies worldwide.

Public health crises such as pandemics or other outbreaks could adversely impact our business. As a result of the COVID-19 pandemic, and any future pandemics, and governmental responses to such pandemics, we may in the future experience disruptions that could severely impact our business, preclinical studies, clinical trials, and commercialization activities, including:

- halting or suspending enrollment in our clinical trials;
- delays or difficulties in enrolling and retaining patients in our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site data monitoring and efficacy, safety and translational data collection, processing and analyses, due to limitations on travel imposed or recommended by federal, state, or local governments, employers and others or interruption of clinical trial subject visits, which may impact the collection and integrity of subject data and clinical study endpoints;
- requirements to change the ways in which our preclinical studies and clinical trials are conducted due to governmental regulations as part of a response to the COVID-19 pandemic, which may result in unexpected costs, delays, or discontinuation of our preclinical studies and clinical trials altogether;
- increased adverse events and deaths in our clinical trials due to COVID-19-related infections, which may result in increased complications due to immunosuppression from our lymphodepletion regimen;

- increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19 or being forced to quarantine;

- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;

- interruption or delays in the operations of the FDA and comparable foreign regulatory agencies and necessary interactions with such regulatory agencies due to limitations in employee resources, limitations on travel, forced furlough of government employees, or diversion of resources, which would impact review and approval timelines;

- interruption of, or delays in receiving, supplies of components for our product candidates from our suppliers, including the supply of healthy donor cells, and delays or suspension in manufacturing by our CMOs due to staffing shortages, production slowdowns or stoppages, and disruptions in delivery systems, or due to prioritization of production for COVID-19-specific therapies or vaccines;

- limitations on employee resources that would otherwise be focused on advancing our business, including because of sickness of employees or their families, including executive officers and other key employees, the desire of employees to avoid contact with large groups of people, an increased reliance on working from home, or mass transit disruptions; and

- significant disruptions and volatility in the financial markets.

State and local government responses to the COVID-19 pandemic have included “shelter in place,” “stay at home,” and similar types of orders. Beginning the week of March 16, 2020, the majority of our workforce began working from home. All of our lab workforce has returned to on-site work; however, our corporate and administrative personnel are still mostly working remotely. The effects of the stay-at-home orders and our work-from-home policies may negatively impact productivity, disrupt our business, and delay our regulatory and clinical timelines for our product candidates, the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on our ability to conduct our business in the ordinary course. We may take further actions that alter our operations as may be required by federal, state, or local authorities, or which we determine are in the best interests of our employees. The COVID-19 pandemic continues to evolve. The extent to which the COVID-19 pandemic may impact our business, research, preclinical studies and clinical trials, productivity of our employees, supply chains, and access to capital or business development activities will depend on future developments, which are highly uncertain and cannot be predicted with confidence. To the extent the COVID-19 pandemic adversely affects our business, financial condition, results of operations, and prospects, it may also have the effect of amplifying many of the other risks described in this “Risk Factors” section, such as those relating to the timing and results of our current and future clinical trials and our financing needs.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

In addition to the business disruptions caused by the COVID-19 pandemic or potential cybersecurity attacks, our operations, and those of our suppliers, CMOs, CROs, and clinical trial sites, could be subject to disruptions, including those caused by earthquakes, power shortages or outages, telecommunications failures, water shortages or outages, floods, hurricanes, typhoons, fires, extreme weather conditions, epidemics and pandemics, and other natural or man-made disasters or business interruptions. The occurrence of any of these business disruptions could seriously harm our business, financial condition, results of operations, and prospects, and increase our costs and expenses. Our ability to manufacture our product candidates could be disrupted if our operations or those of our suppliers, CMOs, CROs, or clinical trial sites are affected by a natural or man-made

disaster or other business interruption. Our corporate headquarters are located in California near major earthquake faults and fire zones. The ultimate impact on us and our general infrastructure of being located near major earthquake faults and fire zones and being consolidated in certain geographical areas is unknown, but our business, financial condition, results of operations, and prospects could suffer in the event of a major earthquake, fire, or other natural disaster. Furthermore, our preclinical work involves studies in mice. In the past, vivarium sites have been shut down by animal activists and any disturbance or shut down at sites where our preclinical work is being conducted could jeopardize our data and affect our product candidate timelines.

Furthermore, we interact with the FDA and other federal, state, and regulatory agencies, and lack of funding for such agencies or temporary shut-downs can affect our operations. Over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, and has had to furlough critical government employees and stop critical activities. The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels; ability to hire and retain key personnel; statutory, regulatory, and policy changes; and business disruptions, such as those caused by the COVID-19 pandemic. Average review times at the agency have fluctuated in recent years as a result. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions for our product candidates, which could have a material adverse effect on our business.

Unfavorable global economic conditions could adversely affect our business, financial condition, or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. A severe or prolonged economic downturn, or additional global financial crises, could result in a variety of risks to our business, including weakened demand for our product candidates, if approved, or our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers and CMOs, possibly resulting in supply or manufacturing disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which such conditions could adversely impact our business.

Risks Relating to this Offering and Ownership of our Common Stock

We do not know whether a market will develop for our common stock or what the market price of our common stock will be and, as a result, it may be difficult for our stockholders to sell shares of our common stock.

Before this offering, there was no public trading market for our common stock. Although we have applied to list our common stock on the Nasdaq Global Select Market, an active trading market for our shares may never develop or be sustained following this offering. If a market for our common stock does not develop or is not sustained, it may be difficult for holders of our common stock to sell shares of our common stock at an attractive price, if at all.

You will incur immediate and substantial dilution as a result of this offering.

If you purchase common stock in this offering, you will incur immediate and substantial dilution of $ per share, representing the difference between the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and our pro forma net tangible book value per share after giving effect to this offering and the automatic conversion of all outstanding shares of our preferred stock upon the closing of this offering. Moreover, we have issued options in the past that allow the holders to acquire common stock at prices significantly below the assumed initial public offering price. As of May 31, 2021, there were 3,088,275, shares subject to outstanding options with a weighted-average exercise price of $4.75 per share. To the extent that these outstanding options are ultimately exercised or the underwriters exercise their option to purchase additional shares, you will experience further dilution.

The market price of our common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

The initial public offering price for our common stock was determined through negotiations between us and the underwriters. The market price of our common stock following the offering may vary significantly from the initial public offering price. As a result, you may not be able to sell your common stock at or above the initial public offering price. Some of the factors that may cause the market price of our common stock to fluctuate include:

- the timing and results of preclinical and clinical studies for any product candidates that we develop;
- delay, failure, or discontinuation of any of our product candidates or research programs;
- results of preclinical studies, clinical trials, or regulatory approvals of product candidates of our competitors, or announcements about new research programs or product candidates of our competitors;
- adverse regulatory decisions, including failure to receive regulatory approval of one or more of our product candidates;
- unanticipated or serious safety concerns related to our product candidates;
- developments or changing views regarding the use of biologics, including those that involve genome editing;
- commencement or termination of collaborations;
- regulatory or legal developments in the United States and other countries;
- assertions that our product candidates infringe third-party patents;
- invalidity challenges to our intellectual property;
- manufacturing delays;
- acceptance or lack of acceptance of allogeneic products;
- inability to meet the obligations under our collaboration agreement with AbbVie;
- inability to obtain additional collaboration partners;
- the recruitment and retention of key personnel;
- the level of expenses related to any of our product candidates, including preclinical studies and clinical trials, as well as the level related to our research programs;
- the results of our efforts to develop additional product candidates or technologies;
- actual or anticipated changes in estimates as to financial results, development timelines, or recommendations by securities analysts;
- announcements or expectations of additional financing efforts;

- significant lawsuits, including contract disputes with our licensors, licensees, assignors, assignees, suppliers, CMOs, CROs, clinical sites, or stockholder litigation;
- sales of our common stock by us, our insiders, or other stockholders;
- expiration of market stand-off or lock-up agreements;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry, and market conditions; and
- the other factors described in this "Risk Factors" section.

In recent years, the stock market in general, and the market for pharmaceutical and biotechnology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations, including recently in connection with the ongoing COVID-19 pandemic. Broad market and industry factors, including potentially worsening economic conditions and other adverse effects or developments, may seriously affect the market price of our common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our stock shortly following this offering. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert our management's attention and resources from our business.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We do not currently have, and may never obtain, research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock would likely decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

A significant portion of our total outstanding shares is, and will be, restricted from immediate resale following this offering, but may be sold into the market in the near future, which could cause the market price of our common stock to decline significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. After this offering and after giving effect to the conversion of all outstanding shares of our preferred stock into 14,430,522 shares of our common stock upon the closing of this offering, we will have shares of common stock outstanding, or shares if the underwriters exercise their option to purchase additional shares in full, in each case based on the 5,724,982 shares of our common stock outstanding as of May 31, 2021. Of these shares, the shares (or shares if the underwriters exercise their option to purchase additional shares in full) we are selling in this

offering may be resold in the public market immediately. The remaining shares will be restricted under securities laws or as a result of lock-up (which may be waived, with or without notice, by BofA Securities, Inc., Citigroup Global Markets Inc., and SVB Leerink LLC at any time) or other agreements, but may be sold after this offering as described in the "Shares Eligible for Future Sale" section of this prospectus. Moreover, after this offering, holders of an aggregate of shares of our common stock will have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders in the future. We also plan to register all shares of common stock that we may issue under our equity compensation plans or that are issuable upon exercise of outstanding options. Once we register these shares, they can be freely sold in the public market upon issuance and, once vested, subject to volume limitations applicable to our affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

Insiders will continue to have substantial influence over us after this offering, which could limit your ability to affect the outcome of key transactions, including a change of control.

After this offering, our directors and executive officers and their affiliates will beneficially own shares representing approximately % of our outstanding common stock. As a result, these stockholders, if they choose to act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the current market price of our common stock and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors, or they may want us to pursue strategies that deviate from the interests of other stockholders.

We are an "emerging growth company" and may be a "smaller reporting company," and the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and may remain an emerging growth company for up to five years following this offering. For as long as we remain an emerging growth company, we are permitted and plan to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board, or PCAOB, regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, reduced disclosure obligations regarding executive compensation, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, the information we provide stockholders will be different than the information that is available with respect to some other public companies. In this prospectus, we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use this extended transition period for complying with new or

revised accounting standards that have different effective dates for public and private companies until the earlier of the date that we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our consolidated financial statements and interim condensed consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

We may also qualify as a "smaller reporting company" if the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700 million and our annual revenue is less than $100 million during the most recently completed fiscal year. In the event that we qualify as a smaller reporting company, we will continue to be a smaller reporting company after this offering so long as (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue is less than $100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, if we qualify as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, and particularly after we are no longer an "emerging growth company," we will incur significant legal, accounting, and other expenses that we did not incur as a private company. The Dodd-Frank Wall Street Reform and Consumer Protection Act, the Sarbanes-Oxley Act, the listing requirements of the Nasdaq Global Select Market, and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. We expect that we will need to hire additional accounting, finance, legal, and other personnel in connection with our becoming, and our efforts to comply with the requirements of being, a public company, and our management and other personnel will need to devote a substantial amount of time towards maintaining compliance with these requirements. These requirements will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. In addition, we expect that the rules and regulations applicable to us as a public company may make it more difficult and more expensive for us to obtain directors' and officers' liability insurance, which could make it more difficult for us to attract and retain qualified members of our board of directors or executive officers.

After this offering, we will be subject to Section 404 of the Sarbanes-Oxley Act and the related rules of the SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. Beginning with the second annual report that we will be required to file with the SEC, Section 404 requires an annual management assessment of the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting.

During the course of our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports. Furthermore, if we identify any material weaknesses, we may not detect errors on a timely basis and our financial statements may be materially misstated. We or our independent registered public accounting firm may not be able to conclude on an ongoing basis that we have

effective internal control over financial reporting, which could materially and adversely affect our business, financial condition, results of operations, and prospects; cause investors to lose confidence in our reported financial information; and cause the trading price of our stock to fall. In addition, as a public company we will be required to file accurate and timely quarterly and annual reports with the SEC under the Exchange Act. In order to report our results of operations and financial statements on an accurate and timely basis, we will depend in part on third parties to provide timely and accurate notice of their costs to us. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from the Nasdaq Global Select Market, or other adverse consequences that would materially and adversely affect our business, financial condition, results of operations, and prospects.

We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We cannot specify with certainty the particular uses of the net proceeds we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in "Use of Proceeds." Accordingly, you will have to rely upon the judgment of our management with respect to the use of the proceeds, with only limited information concerning management's specific intentions. Our management may spend a portion or all of the net proceeds from this offering in ways that our stockholders may not desire or that may not yield a favorable return. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations, and prospects. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Participation in this offering by our existing principal stockholders or their affiliated entities may reduce the public float for our common stock.

To the extent our existing principal stockholders or their affiliated entities participate in this offering, such purchases may reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by our executive officers, directors, and principal stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

We do not expect to pay any dividends for the foreseeable future. Investors in this offering may never obtain a return on their investment.

You should not rely on an investment in our common stock to provide dividend income. We do not anticipate that we will pay any dividends to holders of our common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations. In addition, any future credit facility may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any return on their investment. As a result, investors seeking cash dividends should not purchase our common stock.

Provisions in our amended and restated certificate of incorporation, our amended and restated bylaws, and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation, amended and restated bylaws, and Delaware law contain provisions that may have the effect of discouraging, delaying, or preventing a change in control of us or changes in our management that stockholders may consider favorable, including transactions in which you might

otherwise receive a premium for your shares. Our amended and restated certificate of incorporation and bylaws, which will become effective upon the closing of this offering, include provisions that:

- authorize "blank check" preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend, and other rights superior to our common stock;
- create a classified board of directors whose members serve staggered three-year terms;
- specify that special meetings of our stockholders can be called only by our board of directors;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder matters to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- provide that our directors may be removed only for cause;
- specify that no stockholder is permitted to cumulate votes at any election of directors;
- expressly authorized our board of directors to make, alter, amend, or repeal our amended and restated bylaws; and
- require supermajority votes of the holders of our common stock to amend specified provisions of our amended and restated certificate of incorporation and amended and restated bylaws.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock.

In addition, because we are incorporated in the State of Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, or DGCL, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws, or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

As a California-domiciled public company, we will be required to have at least two or three women and at least one director from an underrepresented community on our board of directors by the end of 2021, depending on the size of our board at the time.

Our success depends in part on our continued ability to attract, retain, and motivate highly qualified individuals to our board of directors. As a public company headquartered in California, we will be required to have two or three women on our board of directors by the end of 2021, depending on the size of our board of

directors at the time. We will be also required to have at least one director from an underrepresented community by the end of 2021 and to have two or three directors from an underrepresented community by the end of 2022, depending on the size of our board of directors at the time. While we currently have two women and one director from an underrepresented community on our board of directors, recruiting and retaining board members carries uncertainty, and failure to comply with this California requirement could result in financial penalties.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, executive officers, or employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising under the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, Section 22 of the Securities Act of 1933, as amended, or the Securities Act, creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation further provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Although the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

This exclusive forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, executive officers, or other employees, which may discourage lawsuits against us and our directors, executive officers, and other employees. If a court were to find the exclusive forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, future revenue, business strategy, prospects, product candidates, planned and ongoing preclinical studies and clinical trials, results of preclinical studies and clinical trials, research and development costs, regulatory approvals, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential,” or “continue” or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. Forward-looking statements include, but are not limited to, statements concerning:

- the initiation, timing, progress and results of our product candidate preclinical studies, clinical trials, and research programs;
- our ability to demonstrate, and the timing of, preclinical proof-of-concept *in vivo* for our product candidates;
- our ability to successfully develop our product candidates and to obtain and maintain regulatory approval for our product candidates;
- our ability to successfully complete our clinical trials;
- our ability to quickly leverage our initial product candidates and to progress additional candidates;
- the prevalence of certain diseases and conditions we intend to treat and the size of the market opportunity for our product candidates;
- estimates of the number of patients with certain diseases and conditions we intend to treat and the number of patients that we will enroll in our clinical trials;
- the likelihood of our clinical trials demonstrating safety and efficacy of our product candidates;
- the beneficial characteristics, safety, efficacy, therapeutic effects, and potential advantages of our product candidates;
- the timing or likelihood of regulatory filings and approval for our product candidates;
- our ability to meet future regulatory standards with respect to our product candidates;
- our plans relating to the further development and manufacturing of our product candidates, including additional indications for which we may pursue;
- our ability to identify additional products, product candidates, or technologies with significant commercial potential that are consistent with our commercial objectives;
- the rate and degree of market acceptance and therapeutic benefits of our product candidates;
- the implementation of our strategic plans for our business, product candidates, research programs, and technologies;

- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and genome-editing technology;
- assertions that our product candidates infringe third-party patents;
- invalidity challenges to our intellectual property;
- the impact of COVID-19 on our business and operations;
- anticipated developments related to our competitors and our industry;
- our competitive position and ability to leverage the clinical, regulatory, and manufacturing advancements made by our genome-editing technologies to accelerate our clinical trials and regulatory approval of product candidates;
- the success of competing therapies that are or may become available;
- our ability to identify and enter into future license agreements and collaborations;
- the expected potential benefits of strategic collaborations with third parties and our ability to attract collaborators with development, regulatory, manufacturing, or commercialization expertise;
- our reliance on third parties to conduct clinical trials of our product candidates;
- our reliance on third parties for the manufacture of our product candidates;
- our plans relating to sales strategy, manufacturing and commercializing our product candidates;
- our ability to attract and retain sales personnel, or to contract with a sales organization, if our product candidates are approved;
- anticipated regulatory developments in the United States and foreign countries in which we may seek regulatory approval for our product candidates in the future;
- our ability to attract and retain key scientific and management personnel;
- our financial performance;
- the sufficiency of our existing capital resources to fund our future operating expenses and capital expenditure requirements;
- our expectations regarding the period during which we will qualify as an emerging growth company under the JOBS Act or a smaller reporting company; and
- our anticipated use of our existing resources and the proceeds from this offering, estimates of our expenses, capital requirements, and needs for additional financing.

The forward-looking statements in this prospectus are only predictions and are based largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of known and unknown risks, uncertainties and assumptions, including those described under the sections in this prospectus entitled “Risk Factors” and “Management’s

Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in a very competitive and rapidly evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

INDUSTRY AND MARKET DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations about our product candidates, market position, market opportunity, market size, and the incidence of certain medical conditions, is based on industry information and other third-party sources. Our estimates of the potential market opportunities for our product candidates include a number of key assumptions based on our industry knowledge and industry publications, which we believe to be reasonable. However, any projections, assumptions, and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to risks and uncertainties due to a variety of factors, including those described in “Risk Factors” and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by independent third parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately $ million, (or approximately $ million if the underwriters exercise their option to purchase additional shares in full), assuming an initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase or decrease in the initial public offering price per share would increase or decrease, as applicable, our net proceeds, after deducting estimated underwriting discounts and commissions, by $ million (assuming no exercise of the underwriters' option to purchase additional shares). Each increase or decrease of 1,000,000 shares in the number of shares offered by us would increase or decrease, as applicable, our net proceeds by $ million, assuming an initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing.

We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:

- approximately $ million to advance the clinical development of our CB-010 product candidate, including funding the ANTLER phase 1 clinical trial through initial data;
- approximately $ million to fund IND-enabling activities and the potential initiation of clinical studies for our CB-011 and CB-012 product candidates;
- approximately $ million to continue research and development of our iPSC-to-NK platform for solid tumor-targeted cell therapies, advancement of our genome-editing technologies, as well as discovery-stage research toward potential additional programs; and
- the remainder for working capital and other general corporate purposes, including the additional costs associated with being a public company.

Our first clinical trial, which is for our CB-010 product candidate, was opened at the end of 2020. The rest of our product candidates are currently in preclinical development. The specific allocation of the proceeds from this offering and our current cash and cash equivalents towards specific product candidates will depend on, among other things, results from our research and development efforts for each product candidate, the timing and success of our preclinical studies and the timing and outcome of regulatory submissions.

We expect the net proceeds from this offering, together with our existing cash and cash equivalents, will not be sufficient for us to advance any of our product candidates through regulatory approval, and we will need to raise additional capital to complete the development and potential commercialization of any of our product candidates.

We may also use a portion of the net proceeds to in-license, acquire, or invest in complementary technologies, assets, manufacturing capabilities, or intellectual property. We periodically evaluate strategic opportunities; however, we have no current commitments to enter into any such acquisitions or make any such investments.

Our expected use of net proceeds from this offering represents our current intentions based upon present plans and business conditions. As of the date of this prospectus, we cannot predict with complete certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the actual amounts that we will spend on the uses set forth above.

Based on our planned use of the net proceeds from this offering and our existing cash and cash equivalents, we estimate that such funds will be sufficient to enable us to fund our operating expenses, debt service, and capital expenditure requirements through at least the next 12 months from the date the interim condensed consolidated financial statements included elsewhere in this prospectus are available to be issued. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

We may find it necessary or advisable to use the net proceeds from this offering for other purposes, and we will have broad discretion in the application of the net proceeds. Pending the uses described above, we plan to invest the net proceeds from this offering in short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit, or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock and do not anticipate paying any cash dividends in the foreseeable future. We currently anticipate that we will retain all available funds for use in the operation and expansion of our business. Any future determination to pay dividends on our common stock will be made at the discretion of our board of directors and will depend upon, among other factors, our financial condition, results from operations, current and anticipated cash needs, plans for expansion, and other factors that our board of directors may deem relevant.

CAPITALIZATION

The following table summarizes our cash and cash equivalents and capitalization as of March 31, 2021:

- on an actual basis;
- on a pro forma basis, to reflect (i) the filing and effectiveness of our amended and restated certificate of incorporation in Delaware, which will be in effect immediately prior to the completion of this offering; and (ii) the automatic conversion of all outstanding shares of convertible preferred stock into an aggregate of 14,430,522 shares of our common stock immediately prior to the closing of this offering; and
- on a pro forma as adjusted basis, to reflect (i) the pro forma items described immediately above; and (ii) the sale and issuance by us of shares of common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read the information in this table together with the interim condensed consolidated financial statements and related notes to those statements included elsewhere in this prospectus, as well as the information set forth under the headings "Use of Proceeds," "Summary Consolidated Financial Data," and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The pro forma and pro forma as adjusted information below is illustrative only and our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of the offering determined at pricing (in thousands, except share and per share amounts):

	As of March 31, 2021		
	Actual	Pro Forma	Pro Forma As Adjusted(1)
		(Unaudited)	
Cash and cash equivalents	$ 145,924	$ 145,924	
Long-term debt (inclusive of current portion)	1,581	1,581	
Convertible preferred stock (par value $0.0001 per share; actual: 14,430,622 authorized and 14,430,522 issued and outstanding; pro forma and pro forma as adjusted: no shares authorized, issued or outstanding)	150,150	—	
Stockholders' equity (deficit):			
Common stock (par value $0.0001 per share; actual: 24,500,000 shares authorized, 5,663,068 shares issued and outstanding; pro forma: 24,500,000 shares authorized, 20,093,590 shares issued and outstanding; pro forma as adjusted: shares authorized, shares issued, and shares outstanding)	1	2	
Additional paid-in capital	8,340	158,489	
Accumulated deficit	(44,030)	(44,030)	
Total stockholders' equity (deficit)	(35,689)	114,461	
Total capitalization	$ 116,042	$ 116,042	

(1) Each $1.00 increase (decrease) in the assumed initial price to the public of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) each of

cash and cash equivalents, additional paid-in capital, total stockholders' equity (deficit) and total capitalization on a pro forma as adjusted basis by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) each of cash and cash equivalents, additional paid-in capital, total stockholders' equity (deficit) and total capitalization on a pro forma as adjusted basis by approximately $ million, assuming that the assumed initial price to the public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial price to the public and other terms of this offering determined at pricing.

The number of shares of our common stock issued and outstanding, pro forma and pro forma as adjusted, in the table above is based on shares of common stock outstanding (after giving effect to the conversion of all of our shares of preferred stock outstanding as of March 31, 2021 into an aggregate of 14,430,522 shares of our common stock immediately prior to the completion of this offering), and excludes as of March 31, 2021:

- 2,755,259 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021 under the 2013 Plan at a weighted average exercise price of $4.77 per share;
- 250,000 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021 under the 2012 Plan at a weighted average exercise price of $0.10 per share;
- 949,632 shares of common stock available for future issuance as of March 31, 2021 under the 2013 Plan;
- shares of common stock reserved for issuance under the 2021 Plan, which will become effective in connection with this offering; and
- shares of common stock reserved for future issuance under 2021 ESPP, which will become effective in connection with this offering.

DILUTION

If you invest in our common stock in this offering, you will experience immediate and substantial dilution in the pro forma as adjusted net tangible book value of your shares of common stock. Dilution in pro forma as adjusted net tangible book value represents the difference between the assumed initial price to the public per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately following this offering.

Historical net tangible book value (deficit) per share represents our total tangible assets less total liabilities and convertible preferred stock divided by the number of shares of outstanding common stock as of March 31, 2021, or 5,663,068 shares. Our historical net tangible deficit as of March 31, 2021 was $(35.7) million, or $(6.30) per share of our common stock.

Our pro forma net tangible book value as of March 31, 2021 was $114.5 million, or $5.70 per share, based on the total number of shares of our common stock outstanding as of March 31, 2021. Pro forma net tangible book value, before the issuance and sale of shares in this offering, gives effect to the automatic conversion of all of our outstanding convertible preferred stock outstanding as of March 31, 2021 into an aggregate of 14,430,522 shares of common stock immediately prior to the closing of this offering.

After giving effect to our sale of shares of common stock in this offering at an assumed initial public offering price $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2021 would have been approximately $ million, or $ per share. This represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to existing stockholders and an immediate dilution of $ per share to investors participating in this offering. Dilution per share to new investors participating in this offering is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors.

The following table illustrates this dilution on a per share basis to new investors:

Assumed initial public offering price per share		$
Historical net tangible book value (deficit) per share of common stock as of March 31, 2021	$ (6.30)	
Increase in net tangible book value per share of common stock attributable to pro forma adjustments described above	$ 12.00	
Pro forma net tangible book value (deficit) per share of common stock as of March 31, 2021	$ 5.70	
Increase in pro forma net tangible book value per share of common stock attributable to this offering		
Pro forma as adjusted net tangible book value per share of common stock after this offering		
Dilution per share of common stock to new investors participating in this offering		$

If the underwriters exercise in full their option to purchase additional shares of common stock from us in this offering, our pro forma as adjusted net tangible book value per share after the offering would be $ million, representing an immediate increase in pro forma as adjusted net tangible book value per share of $ to existing stockholders and immediate dilution of $ per share to new investors, in each case

assuming an initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase (decrease) in the assumed initial price to the public of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value by approximately $, or approximately $ per share, and increase (decrease) the dilution per share to investors participating in this offering by approximately $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses.

We may also increase or decrease the number of shares we are offering. An increase of 1,000,000 in the number of shares offered by us would increase the pro forma as adjusted net tangible book value by approximately $, or $ per share, and the dilution per share to investors participating in this offering would be $ per share, assuming that the assumed initial price to the public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses. Similarly, a decrease of 1,000,000 shares in the number of shares offered by us would decrease the pro forma as adjusted net tangible book value by approximately $, or $ per share, and the dilution per share to investors participating in this offering would be $ per share, assuming that the assumed initial price to the public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial price to the public and other terms of this offering determined at pricing.

The following table summarizes, on the pro forma as adjusted basis described above as of March 31, 2021, the differences between the number of shares of common stock purchased from us, the total consideration paid to us in cash and the average price per share paid by existing stockholders and by investors participating in this offering at the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percentage	Amount	Percentage	
Existing stockholders	20,093,590	%	$ 160,887,907	%	$ 8.01
New investors		%	$	%	$
Total		100%	$	100%	

The number of shares of our common stock issued and outstanding, pro forma and pro forma as adjusted, in the table above is based on shares of common stock outstanding (after giving effect to the conversion of all of our shares of preferred stock outstanding as of March 31, 2021 into an aggregate of 14,430,522 shares of our common stock immediately prior to the completion of this offering), and excludes as of March 31, 2021:

- 2,755,259 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021 under the 2013 Plan at a weighted average exercise price of $4.77 per share;
- 250,000 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021 under the 2012 Plan at a weighted average exercise price of $0.10 per share;
- 949,632 shares of common stock available for future issuance as of March 31, 2021, under the 2013 Plan;

- shares of common stock reserved for issuance under the 2021 Plan, which will become effective in connection with this offering; and

- shares of common stock reserved for future issuance under the 2021 ESPP, which will become effective in connection with this offering.

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase additional shares is exercised in full, the number of shares held by existing stockholders will be reduced to % of the total number of shares of common stock to be outstanding upon completion of this offering, and the number of shares of common stock held by investors participating in this offering will be further increased to % of the total number of shares of common stock to be outstanding upon completion of the offering.

Furthermore, we may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. New investors will experience further dilution if any of our outstanding options are exercised, new options are issued and exercised under our equity incentive plans or we issue additional shares of common stock, other equity securities or convertible debt securities for lower consideration per share than in this offering in the future.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section titled "Summary Consolidated Financial Data," and our consolidated financial statements and the related notes included elsewhere in this prospectus. This discussion and analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans and expectations related to future events and our future financial performance that involve risks, uncertainties and assumptions, such as statements regarding our intentions, plans, objectives and expectations for our business. Our actual results and the timing of selected events could differ materially from those described in or implied by these forward-looking statements as a result of several factors, including those set forth in the section titled "Risk Factors." See also the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biopharmaceutical company dedicated to transforming the lives of patients with devastating diseases by applying our novel CRISPR platform, **C**RISPR **h**ybrid **R**NA-**DNA**, or chRDNA, pronounced "chardonnay," toward the development of next-generation, genome-edited cell therapies. Our renowned founders, including a Nobel laureate, are pioneers in CRISPR genome editing. Our chRDNA technology has demonstrated superior specificity and high efficiency in preclinical studies, which enables us to perform multiple, precise genomic edits, while maintaining genomic integrity.

We believe that our technology has broad potential to generate gene and cell therapies in oncology and in therapeutic areas beyond oncology, including immune cell therapies, cell therapies derived from genome-edited induced pluripotent stem cells, or iPSCs, and *in vivo* genome-editing therapies.

The genome-editing technologies currently used in the allogeneic cell therapy field generally have limited efficiency, specificity, and versatility for performing the multiple, precise genomic edits necessary to address insufficient persistence. Our chRDNA technology is designed to address these genome-editing limitations and improve cell therapy activity. By applying this approach to allogeneic cell therapies, we believe we can unlock their full potential by improving upon their effectiveness and durability.

We are initially focused on advancing multiple proprietary allogeneic cell therapies for the treatment of both hematologic malignancies and solid tumors against cell surface targets for which autologous CAR-T cell therapeutics have previously demonstrated clinical proof of concept, including both CD19 and B cell maturation antigen, or BCMA, as well as new targets. We use our chRDNA technology to enhance, or armor, our cell therapies by creating additional genomic edits to improve persistence of antitumor activity.

Our first lead product candidate, CB-010, is, to our knowledge, the first clinical-stage allogeneic anti-CD19 chimeric antigen receptor T cell, or CAR-T cell, therapy with programmed cell death protein 1, or PD-1, removed from the CAR-T cell surface by a genome-edited knockout of the *PDCD1* gene. We have demonstrated in preclinical models that the PD-1 knockout improves the persistence of antitumor activity by disrupting a pathway that leads to rapid T cell exhaustion. CB-010 is being evaluated in a phase 1 clinical trial in patients with relapsed or refractory B cell non-Hodgkin lymphoma, or B-NHL, with initial data expected in 2022.

Our second lead product candidate, CB-011, is an allogeneic CAR-T cell product candidate and is, to our knowledge, the first anti-BCMA CAR-T cell therapy incorporating an immune cloaking approach that includes both the removal of the endogenous beta-2-microglobulin, or B2M, protein and insertion of a beta-2-microglobulin–human-leukocyte-antigen-E–peptide, or B2M–HLA-E, transgene. This strategy is designed to blunt CAR-T cell rejection by both patient T cells and natural killer, or NK, cells to enable more durable antitumor activity. CB-011 is in preclinical development for relapsed or refractory multiple myeloma, or MM, with an investigational new drug, or IND, filing expected in 2022.

Our CB-012 program is an allogeneic armored CAR-T cell therapy targeting CD371, currently in preclinical development for the treatment of relapsed or refractory acute myeloid leukemia, or AML, with an IND filing expected in 2023. CD371 is an attractive target for AML due to its expression on myeloid cancer cells, its enrichment in leukemic stem cells, and its absence on hematopoietic stem cells.

We are also developing allogeneic CAR-NK cell therapies derived from genome-edited iPSCs for the treatment of solid tumors. These CAR-NK product candidates will contain genomic edits designed to overcome the challenges of targeting solid tumors, including trafficking, heterogeneity, and the immunosuppressive tumor microenvironment.

We control a robust patent portfolio protecting our chRDNA technology as well as certain of our allogeneic cell therapy targets.

In February 2021, we entered into a collaboration with AbbVie Manufacturing Management Unlimited Company, or AbbVie, to develop two new CAR-T cell therapies for AbbVie. We view this collaboration as an external recognition of the potential for our chRDNA genome-editing technology to significantly improve genome-editing specificity and efficiency.

Since our founding in 2011, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, developing our genome-editing platform technologies, developing our product candidates and building our pipeline, creating and maintaining our intellectual property portfolio, and establishing arrangements with third parties for the manufacture of our product candidates. We do not have any products approved for commercial sale and have not generated any revenues from product sales and have incurred net losses since commencement of our operations.

To date, we have primarily funded our operations through revenues from our license agreements, license and collaboration agreements, and a service agreement; the sale of shares of Intellia Therapeutics, Inc., or Intellia, common stock that we received as consideration for our License Agreement with Intellia; and the sale of our convertible preferred shares. As of March 31, 2021, we had approximately $145.9 million in cash and cash equivalents. Based on our current operating plan, we expect our existing cash will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months from the date the interim condensed consolidated financial statements included elsewhere in this prospectus are available to be issued. See “—Liquidity, Capital Resources and Capital Requirements.”

Our net losses for the fiscal years ended December 31, 2019 and 2020 were $23.4 million and $34.3 million, respectively. Our net losses for the three months ended March 31, 2020 and 2021 were $9.8 million and $13.2 million, respectively. We had an accumulated deficit of $30.9 million and $44.0 million as of December 31, 2020 and March 31, 2021, respectively. Our net losses and operating losses may fluctuate from quarter to quarter and year to year depending primarily on the timing of our clinical trials and nonclinical studies and our other research and development expenses. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, audit, accounting, regulatory, tax-related, director and officer liability insurance, investor relations, and other expenses that we did not incur as a private company. We anticipate that our expenses will increase substantially if and as we:

- progress our ANTLER phase 1 clinical trial and advance further clinical development of our CB-010 product candidate;
- continue our preclinical and clinical development of our other product candidates, including CB-011, CB-012, and CB-020, and any other product candidates we identify and choose to develop;
- hire additional clinical, quality control, and scientific personnel;
- seek to identify additional research programs and additional product candidates;

- further develop our genome-editing technologies;
- acquire or in-license technologies;
- expand, maintain, enforce, and defend our intellectual property estate;
- seek regulatory and marketing approvals for any of our product candidates that successfully complete clinical trials, if any;
- establish and expand manufacturing capabilities and supply chain capacity for our product candidates;
- add operational, legal, financial, and management information systems and personnel;
- experience any delays, challenges, or other issues associated with any of the above, including the failure of clinical trials meeting endpoints, the generation of unanticipated preclinical study results or clinical trial data subject to differing interpretations, or the occurrence of potential safety issues or other development or regulatory challenges;
- make royalty, milestone, or other payments under current and any future in-license or assignment agreements;
- establish a sales, marketing, and distribution infrastructure to commercialize any product candidates for which we obtain marketing approval; and
- operate as a public company.

We do not own or operate any manufacturing facilities and we outsource a substantial portion of our clinical trial studies to third parties. We use multiple contract manufacturing organizations, or CMOs, to individually manufacture under current good manufacturing processes, or cGMP, the plasmids, chRDNA guides, Cas proteins, and AAV6 vectors used in the manufacture of our CAR-T cells. We expect to rely on our CMOs in the future for the manufacturing of our product candidates to expedite readiness for future clinical trials and most of these CMOs have demonstrated capability in preparation of materials for commercialization. Additionally, we may decide to build our own manufacturing facility in the future to provide us greater flexibility and control over our clinical or commercial manufacturing needs.

Because of the numerous risks and uncertainties associated with therapeutic product development, we may never achieve profitability, and unless and until we are able to develop and commercialize our product candidates, we will need to continue to raise additional capital. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through private or public equity or debt financings, collaborations, strategic alliances, and licensing arrangements with third parties. There are no assurances that we will be successful in obtaining an adequate level of financing to support our business plans when needed on acceptable terms, or at all. If we raise additional funds through collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise capital as and when needed or on attractive terms, we may have to significantly delay, reduce or discontinue the development and commercialization of our product candidates or scale back or terminate our pursuit of new in-licenses and acquisitions.

Impact of the COVID-19 Pandemic

The COVID-19 pandemic has caused governments worldwide to implement measures to slow the spread of the outbreak through quarantines, travel restrictions, business shutdowns, and other measures. In response to the COVID-19 pandemic, starting on March 17, 2020, our entire workforce began working remotely pursuant to state, county, and city requirements. Additionally, for the period from April 6, 2020, to May 5, 2020, we reduced the

salaries and workload of approximately 50% of our research employees who could not work in the lab during this period. Since May 2020, we have gradually brought back on site all of our research employees whose work must be performed in the lab. Approximately 40% of our total workforce (primarily legal, accounting, human resources, senior research and development personnel, and our executive officers) is still primarily working remotely as of May 31, 2021. We experienced no significant workforce reduction during the COVID-19 pandemic.

We and our CMOs, CROs, and other third-party vendors may face disruptions that could delay or otherwise affect our ability to initiate and complete preclinical studies or clinical trials. The COVID-19 pandemic has had an impact on our supply chain, although these issues have been alleviated in recent months. For example, in the early stages of the COVID-19 pandemic, we experienced delays in receiving healthy donor cells used in the manufacture of our CB-010 product candidate. We are currently receiving adequate supplies of donor cells.

Since the start of the COVID-19 pandemic, we have been and will continue to be focused on the safety of our employees. In response to the COVID-19 pandemic, we have instituted detailed on-site protocols and procedures in accordance with guidance provided by the Centers for Disease Control, or CDC, the State of California, and regulations and guidelines promulgated by the County of Alameda and the City of Berkeley. As of May 31, 2021, our on-site employees are required to wear masks at all times, maintain social distancing of at least six feet, avoid common areas, and office occupancy is limited to one employee. We have reconfigured several labs to accommodate social distancing. At this point in time, we do not know when we will bring our non-lab functions back on site full-time.

In May 2020, we received a Paycheck Protection Plan, or PPP, loan from the Small Business Administration, or SBA, in the amount of $1.6 million, which we used exclusively to pay employees' salaries. In December 2020 we submitted an application to have our PPP loan forgiven, and on May 22, 2021 our PPP loan was forgiven in full by the SBA.

To the extent the COVID-19 pandemic adversely affects our business prospects, financial condition, and results of operation, it may also have the effect of exacerbating many of the other risks described in the "Risk Factors" section, such as those relating to the timing and results of our planned and future clinical trials and our financing needs. See "Risk Factors" for a further discussion of the potential adverse impact of COVID-19 on our business, results of operations, and financial condition.

Components of Results of Operations

Licensing and Collaboration Revenue

We have not generated any revenue from product sales to date and do not expect to generate any revenue from the sale of products in the foreseeable future. If our development efforts for our product candidates are successful and result in regulatory approval and commercialization, we may generate revenue in the future from product sales. We cannot predict if, when, or to what extent we will generate revenue from the commercialization and sale of our product candidates if we succeed in obtaining regulatory approval for such product candidates.

To date, all of our revenue consists of licensing and collaboration revenue, earned from collaboration and/or licensing agreements entered into with third parties and related parties. Under these agreements, we license rights to certain intellectual property controlled by us. The terms of these arrangements typically include payment to us of one or more of the following: nonrefundable, upfront license fees or exclusivity fees; annual maintenance fees; regulatory and/or commercial milestone payments; research and development payments; and royalties on the net sales of products and/or services. Each of these payments results in licensing and collaboration revenues. Our revenues under such licensing and collaboration agreements were $5.8 million and $12.4 million for the years ended December 31, 2019 and 2020, respectively, and $1.7 million and $1.6 million for the three months ended March 31, 2020 and 2021, respectively. See "Business—Strategic Agreements."

For additional information about our revenue recognition policy related to our licensing and collaboration agreements, see Note 2 to each of our consolidated financial statements and interim condensed consolidated financial statements included elsewhere in this prospectus.

For the foreseeable future we expect substantially all of our revenue will be generated from licensing and collaboration agreements.

Operating Expenses

Research and Development Expenses

Our research and development expenses consist of internal and external expenses incurred in connection with the development of our product candidates, development of our platform technologies, and our in-licensing and assignment agreements.

External costs include:

- costs associated with acquiring technology and intellectual property licenses that have no alternative future uses;
- costs incurred in connection with the preclinical and clinical development of our product candidates, including under agreements with CROs and other third parties that conduct clinical trials on our behalf;
- costs of supplying the components for, and the manufacturing of, our product candidates for use in our preclinical studies and clinical trials; and
- other research and development costs, consisting of laboratory materials and supplies consulting services, and the Memorial Sloan Kettering Cancer Center, or MSKCC, success payments liability.

Internal costs include:

- employee-related costs, including salaries, benefits, and share-based compensation expense, for our research and development personnel; and
- facilities and other overhead expenses, including expenses for rent and facilities maintenance and depreciation.

We expense research and development costs as incurred. Costs of certain activities are recognized based on an evaluation of the progress to completion of specific tasks. Payments made prior to the receipt of goods or services that will be used or rendered for future research and development activities are deferred and capitalized as prepaid expenses and other current assets on our balance sheet. The capitalized amounts are recognized as expense as the goods are delivered or the related services are performed. Historically, we have not tracked external costs by clinical program. In late August 2020, the U.S. Food and Drug Administration, or the FDA, cleared our IND for our CB-010 product candidate. Following this offering, we intend to separately track certain external costs for each clinical program. However, we do not currently track, and do not intend to track, costs that are deployed across multiple programs.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will increase substantially for the foreseeable future as we continue to implement our business strategy; advance our CB-010 product candidate through clinical trials and later stages of development; conduct clinical trials for our other product candidates; seek regulatory approvals for any product

candidates that successfully complete clinical trials; expand our research and development efforts; incur expenses associated with hiring additional personnel to support our research and development efforts; and seek to identify, acquire, and develop additional product candidates.

The successful development of CB-010, CB-011, CB-012, CB-020, and our other potential future product candidates is highly uncertain. Accordingly, at this time, we cannot reasonably estimate or know the nature, timing, and costs of the efforts that will be necessary to complete the development of these product candidates. We are also unable to predict when, if ever, we will generate revenue and material net cash inflows from the commercialization and sale of any of our product candidates for which we may obtain marketing approval. We may never succeed in achieving regulatory approval for any of our product candidates. The duration, costs, and timing of preclinical studies, clinical trials, and development of our product candidates will depend on a variety of factors, including:

- sufficiency of our financial and other resources;
- acceptance of our chRDNA genome-editing technology;
- ability to develop differentiating features so that our products have a competitive edge;
- completion of preclinical studies;
- establishment, maintenance, enforcement, and defense of patent and other intellectual property rights;
- our ability to not infringe, misappropriate, or otherwise violate third-party intellectual property rights;
- clearance of INDs to initiate clinical trials;
- successful enrollment in, and completion of, our clinical trials on our product candidates;
- data from our clinical trials that support an acceptable risk-benefit profile of our product candidates for the intended patient populations and that demonstrate safety and efficacy;
- entry into collaborations to further the development of our product candidates or for the development of new product candidates;
- successful development of our internal process development and transfer to larger-scale facilities;
- establishment of agreements with CMOs for clinical and commercial supplies and scaling up manufacturing processes and capabilities to support our clinical trials;
- receipt of regulatory and marketing approvals from applicable regulatory authorities;
- regulatory exclusivity for our product candidates;
- establishing sales, marketing, and distribution capabilities and commercial launch of our product candidates if and when approved, whether by us or in collaboration with third parties;
- maintenance of a continued acceptable safety profile of our products post-approval;
- acceptance of our product candidates, if and when approved by the applicable regulatory authorities, by patients, the medical community, and third-party payors;
- ability of our products to compete with other therapies and treatment options;
- establishment and maintenance of healthcare coverage and adequate reimbursement; and

- expanding indications and patient populations for our products.

The following table summarizes our research and development expenses for the years ended December 31, 2019 and 2020 and the three months ended March 31, 2020 and 2021:

	Years Ended December 31,		Three Months Ended March 31,	
	2019	2020	2020	2021
	(in thousands)			
External costs:				
Acquisition of technology and intellectual property licenses	$ 123	$ 3,160	$ 640	$ 1,175
Services provided by third-party CROs, CMOs, and other third parties that conduct preclinical studies and clinical trials on our behalf	4,898	11,021	3,509	2,858
Other research and development expenses	6,765	7,290	1,292	2,722
Total external costs	11,786	21,471	5,441	6,755
Internal costs:				
Payroll and personnel expenses	8,302	8,794	2,155	2,435
Facilities and other allocated expenses	3,547	4,160	1,045	975
Total internal costs	11,849	12,954	3,200	3,410
Total research and development expenses	$23,635	$34,425	$ 8,641	$10,165

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel costs, intellectual property costs, consulting costs, and allocated overhead, including rent, equipment depreciation, and utilities. Personnel costs consist of salaries, benefits, and stock-based compensation for our general and administrative personnel. Intellectual property costs include expenses for filing, prosecuting, and maintaining patents and patent applications, including certain of the patents and patent applications that we license from third parties. We are entitled to receive reimbursement of a portion of the costs for filing, prosecuting, and maintaining certain patents and patent applications from third parties. We accrue for these reimbursements as the respective expenses are incurred and classify such reimbursements as a reduction of general and administrative expenses. During the years ended December 31, 2019 and 2020, we recorded $4.4 million and $5.8 million, respectively, of patent reimbursements as a reduction to general and administrative expense. During the three months ended March 31, 2020 and 2021, we recorded $1.1 million and $2.1 million, respectively, of patent reimbursements as a reduction to general and administrative expense.

We expect that our general and administrative expenses will increase substantially in the future as a result of expanding our operations, including hiring personnel, preparing for potential commercialization of our product candidates, and additional facility occupancy costs, as well as various incremental costs associated with operating as a public company (including increased legal, audit, and accounting fees, regulatory costs related to maintaining compliance with the rules and regulations of the Securities and Exchange Commission, or the SEC, and the Nasdaq Global Select Market, director and officer liability insurance premiums, investor relations activities, and other accompanying compliance and governance costs). We also expect to increase the size of our administrative function to support the growth of our business.

Other Income (Expense)

Other income (expense) consists primarily of interest income earned on cash and money market funds, interest expense for our capital lease, and the promissory note related to our PPP loan, change in the fair value of Intellia common stock in 2019 and 2020 and other income from the sale and assignment of patent rights. During the three months ended March 31, 2020 and 2021, other income (expense) consists primarily of interest income earned on cash and money market funds, interest expense on our capital lease, and the promissory note related to our PPP loan.

Results of Operations

Comparison of the Years Ended December 31, 2019 and December 31, 2020

The following table summarizes our results of operations for the years ended December 31, 2019 and 2020:

	Years Ended December 31,		Year-over-Year Change	
	2019	2020	$ Change	% Change
	(in thousands, except percentages)			
Licensing and collaboration revenue	$ 5,788	$ 12,361	$ 6,573	114%
Operating expenses				
Research and development	23,635	34,425	10,790	46%
General and administrative	16,458	14,060	(2,398)	(15)%
Total operating expenses	40,093	48,485	8,392	21%
Loss from operations	(34,305)	(36,124)	(1,819)	5%
Other income (expense)				
Interest income	1,047	236	(811)	(77)%
Interest expense	(4)	(20)	(17)	449%
Change in fair value of equity securities	2,294	(733)	(3,027)	(132)%
Other income	—	514	514	100%
Total other income (expense)	3,337	(3)	(3,340)	(100)%
Net loss before provision for income taxes	(30,968)	(36,127)	(5,159)	17%
Benefit from income taxes	(7,537)	(1,819)	5,718	(76)%
Net loss and comprehensive loss	$ (23,431)	$ (34,308)	$ (10,877)	54%

Licensing and Collaboration Revenue

Licensing and collaboration revenue increased $6.6 million, or 114%, from $5.8 million for the year ended December 31, 2019 to $12.4 million for the year ended December 31, 2020. The increase in licensing and collaboration revenue for the year ended December 31, 2020, was primarily driven by a $7.5 million increase related to an exclusive license agreement we entered into in May 2020 with a private company, partially offset by a $1.4 million decrease due to the completion of research and collaboration activities under our Research Collaboration and License Agreement with Genus plc in 2020. The remaining increase was primarily related to other license agreements with various licensees.

The following table summarizes our revenue by licensee for the years ended December 31, 2019 and 2020:

	Years Ended December 31,	
	2019	2020
	(in thousands)	
Genus plc	$ 2,250	$ 844
Private Company, related party	—	7,500
Pioneer, related party(1)	—	(250)
Other licensing agreements	3,538	4,267
Total licensing revenue	$ 5,788	$ 12,361

(1) Includes our upfront payment to Pioneer for assignment of the chRDNA patent family.

Research and Development Expenses

Research and development expenses increased $10.8 million, or 46%, from $23.6 million for the year ended December 31, 2019 to $34.4 million for the year ended December 31, 2020. This increase was primarily related to an increase of $3.0 million in costs associated with our intellectual property license and assignment agreements, an increase of $4.0 million in CMO costs associated with our product candidates, an increase of $2.7 million due to the fair value of the MSKCC success payments liability, an increase of $1.9 million in costs associated with our CRO contracts, an increase of $0.3 million in payments due by us upon the achievement of certain licensing milestones, an increase of $0.6 million in facilities and other allocated expenses, and an increase of $0.5 million in payroll and personnel related expenses, partially offset by a decrease of $2.1 million in laboratory spending due to decreased spending on reagents and lab supplies in 2020 due to the COVID-19 pandemic.

General and Administrative Expenses

General and administrative expenses decreased $2.4 million, or 15%, from $16.5 million for the year ended December 31, 2019 to $14.1 million for the year ended December 31, 2020. This decrease was primarily related to a decrease in legal expenses of $4.0 million related to our Intellia Arbitration (see Note 9 in our consolidated financial statements included elsewhere in this prospectus for more details), a decrease of $1.4 million in reimbursed patent costs, and a decrease of $0.4 million in payroll and personnel related expenses, partially offset by an increase of $2.6 million in costs of filing, prosecuting, and maintaining patents licensed from third parties, and an increase of $0.5 million in facilities and other allocated expense. The remaining increase of $0.3 million was related to increased accounting and professional consulting services.

Other Income (Expense)

Interest income decreased by $0.8 million, or 77%, from $1.0 million for the year ended December 31, 2019 to $0.2 million for the year ended December 31, 2020. This decrease was primarily caused by a decrease in average cash balances in our interest-bearing money market accounts and a decrease in average interest rates.

Interest expense increased by less than $0.1 million for the year ended December 31, 2020, due to interest charged for the promissory note related to our PPP loan.

Change in fair value of equity securities decreased $3.0 million, or 132%, from a gain of $2.3 million for the year ended December 31, 2019 to a loss of $0.7 million for the year ended December 31, 2020. This decrease was primarily due to volatility in stock price of our equity security investment in Intellia’s common stock, as well as the timing and volume of shares of Intellia’s common stock sold during the years ended December 31, 2019 and 2020.

Other income of $0.5 million for the year ended December 31, 2020 was related to earned sale and assignment of certain of our patents and patent applications, which was not an ordinary business activity.

Income Taxes

An income tax benefit of $7.5 million for the year ended December 31, 2019 was generated as a result of an increase in federal net operating losses and research and development tax credits. Income tax benefit decreased $5.7 million for the year ended December 31, 2020. An income tax benefit of $1.8 million was recognized for the year ended December 31, 2020, which was due primarily to the recognition of net operating loss carrybacks under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, which generated a tax refund of taxes paid for the year ended December 31, 2018.

Comparison of the Three Months Ended March 31, 2020 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2020 and 2021:

	Three Months Ended March 31,		Quarter-over-Quarter Change	
	2020	2021	$ Change	% Change
	(in thousands, except percentages)			
Licensing and collaboration revenue	$ 1,701	$ 1,586	$ (115)	-7%
Operating expenses				
Research and development	8,641	10,165	1,524	18%
General and administrative	3,489	4,596	1,107	32%
Total operating expenses	12,130	14,761	2,631	22%
Loss from operations	(10,429)	(13,175)	(2,746)	26%
Other income (expense)				
Interest income	142	4	(138)	-97%
Interest expense	(3)	(5)	(2)	67%
Change in fair value of equity securities	(733)	—	733	-100%
Other income	21	17	(4)	-19%
Total other income (expense)	(573)	16	589	-103%
Net loss before provision for income taxes	(11,002)	(13,159)	(2,157)	20%
Benefit from income taxes	(1,202)	—	1,202	100%
Net loss and comprehensive loss	$ (9,800)	$ (13,159)	$ (3,359)	34%

Licensing and Collaboration Revenue

Licensing and collaboration revenue decreased by $0.1 million, or 7%, from $1.7 million for the three months ended March 31, 2020 to $1.6 million for the three months ended March 31, 2021. The decrease in licensing and collaboration revenue for the three months ended March 31, 2021 was primarily driven by a $0.6 million decrease due to the completion in 2020 of research and collaboration activities under our Research Collaboration and License Agreement with Genus plc, partially offset by a $0.3 million increase in revenues related to existing license agreements, and a $0.2 million increase in revenues related to new license agreements.

The following table summarizes our revenue by licensee for the three months ended March 31, 2020 and 2021:

	Three Months Ended March 31,	
	2020	2021
	(in thousands)	
Genus plc	$ 563	$ —
Other licensing agreements	1,138	1,586
Total licensing revenue	$ 1,701	$ 1,586

Research and Development Expenses

Research and development expenses increased $1.5 million, or 18%, from $8.6 million for the three months ended March 31, 2020 to $10.2 million for the three months ended March 31, 2021. This increase was primarily related to an increase of $0.8 million related to the purchase of materials related to our pre-clinical programs, an increase of $0.9 million related to the expenses incurred in connection with sublicensing fees due under certain of our assignment and licensing agreements, an increase of $0.7 million related to the change in fair value of the MSKCC success payments liability, and an increase of $0.2 million in payroll and personnel related expenses, offset by a $0.4 million decrease in costs associated with the acquisition of in-process research and development, a $0.6 million decrease in CMO costs associated with our product candidates, and a $0.1 million decrease in rent expenses.

General and Administrative Expenses

General and administrative expenses increased $1.1 million, or 32%, from $3.5 million for the three months ended March 31, 2020 to $4.6 million for the three months ended March 31, 2021. This increase was primarily related to a $1.6 million increase in patent prosecution costs, offset by a $1.0 million increase in patent cost reimbursements recorded as a reduction to general and administrative expenses, a $0.3 million increase in accounting and professional services expenses, a $0.2 million increase in payroll related expenses, and a $0.1 million increase in human resources and recruiting services, partially offset by a $0.1 million decrease in legal expenses.

Other Income (Expense)

Interest income decreased by $0.1 million, or 97%, from $0.1 million for the three months ended March 31, 2020 to zero for the three months ended March 31, 2021. This decrease was primarily caused by a decrease in average cash balances in our interest-bearing money market accounts and a decrease in average interest rates.

Change in fair value of equity securities of $0.7 million was related to Intellia common stock shares that we sold during the three months ended March 31, 2020. We have not held any Intellia shares since March 31, 2020.

Income Tax

During the three months ended March 31, 2020, the Company recorded an income tax benefit of $1.2 million. The income tax benefit was primarily due to the recognition of net operating loss carrybacks under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, which generated a tax refund of taxes paid for the year ended December 31, 2018. No income tax benefit or expense was recorded during the three months ended March 31, 2021.

Unaudited Pro Forma Information

Immediately prior to the completion of this offering, all outstanding shares of our convertible preferred stock will automatically convert into shares of our common stock assuming the sale of shares in this offering at the assumed public offering price of $ per share, the mid-point of the price range set forth on the cover page of this prospectus. The unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2020 and for the three months ended March 31, 2021 were computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of convertible preferred stock into shares of common stock, as if such conversion had occurred at the beginning of the period, or their issuance dates if later. Pro forma net loss per share does not include the shares expected to be sold in this offering.

The following table sets forth the computation of the unaudited pro forma basic and diluted net loss per share of common stock for the periods presented:

	Year Ended December 31, 2020	Three Months Ended March 31, 2021
	(in thousands, except share and per share data)	
Numerator:		
Net loss used in calculating pro forma net loss per share, basic and diluted	$ (34,308)	$ (13,159)
Denominator:		
Weighted-average shares of common stock outstanding	4,701,183	5,225,226
Weighted-average convertible preferred stock	7,766,582	9,987,895
Pro forma weighted-average shares outstanding, basic and diluted	12,467,765	15,213,121
Pro forma net loss per share, basic and diluted	$ (2.75)	$ (0.86)

Liquidity, Capital Resources and Capital Requirements

Sources of Liquidity

Since our inception, we have not generated any revenue from product sales and have incurred significant operating losses and negative cash flows from our operations. We have funded our operations through the sale of Series A, A-1, B, and C convertible preferred stock that generated approximately $150.1 million in net proceeds. We also received approximately $88.4 million in net proceeds from the sale of Intellia common stock received under our License Agreement with Intellia. Additionally, we received approximately $72.1 million from licensing agreements, licensing and collaboration agreements, a service agreement, patent assignments, and government grants, including $30.0 million that was received from AbbVie.

As of December 31, 2020 and March 31, 2021, we had cash and cash equivalents of $16.0 million and $145.9 million, respectively. In March 2021, we received net proceeds of $108.8 million from our Series C convertible preferred stock financing and $30.0 million from AbbVie under our Collaboration and License Agreement. We will continue to be dependent upon equity financing, debt financing, and/or other forms of capital raises at least until we are able to generate significant positive cash flows from our operations. We have no ongoing material financing commitments, such as lines of credit or guarantees, that are expected to affect our liquidity over the next five years.

Based on our current operating plan, we expect our existing cash and cash equivalents will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months from the date the interim condensed consolidated financial statements included elsewhere in this prospectus are available to be issued. We have based these estimates on our current assumptions that may require future adjustments based on our ongoing business decisions. Accordingly, we may require additional capital resources earlier than we currently expect.

Funding Requirements

Our primary use of cash is to fund operating expenses and research and development expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable, accrued expenses, and prepaid expenses.

Our future funding requirements will depend on many factors, including the following:

- the initiation, progress, timing, costs, and results of preclinical studies and clinical trials for our product candidates;
- the clinical development plans we establish for these product candidates;
- the number and characteristics of product candidates that we develop;
- the increase in the number of our employees and expansion of our physical facilities to support growth initiatives;
- the outcome, timing, and cost of meeting regulatory requirements established by the FDA and other comparable foreign regulatory authorities;
- whether we enter into any additional collaboration agreements and the terms of any such agreements;
- the cost of filing, prosecuting, maintaining, and enforcing our patents and other intellectual property rights;
- the extent to which we acquire or in-license other product candidates and technologies;
- the cost of defending intellectual property disputes, including patent infringement actions brought by third parties against our products when we file for regulatory approval or thereafter;
- the effect of competing technological and market developments;
- the cost and timing of completion of commercial-scale outsourced manufacturing activities or the cost and timing of completion of clinical-scale and/or commercial-scale internal manufacturing activities;
- the cost of establishing sales, marketing, and distribution capabilities for any product candidates for which we may receive regulatory approval in regions where we choose to commercialize our products without a partner;
- the amount of revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval;
- the achievement of milestones or occurrence of other developments that trigger payments by third parties under any collaboration or licensing agreements;
- our implementation of various computerized informational systems and efforts to enhance operational systems;
- the impact of the COVID-19 pandemic on our clinical development or operations; and
- the costs associated with being a public company.

Furthermore, our operating plans may change, and we may need additional funds to meet operational needs and capital requirements for clinical trials and other research and development expenditures.

If we need to raise additional capital to fund our operations, funding may not be available to us on acceptable terms, or at all. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of, or suspend one or more of our preclinical studies, clinical trials, research and development programs, or commercialization efforts. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, debt financings, collaborations, and licensing arrangements. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in dilution to our stockholders. If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams, or research programs or grant licenses on terms that may not be favorable to us.

Cash Flows

Comparison of the Years Ended December 31, 2019 and 2020 and the Three Months ended March 31, 2020 and 2021

The following summarizes our cash flows for the periods indicated:

	Years Ended December 31,		Three Months Ended March 31,	
	2019	2020	2020	2021
	(in thousands)			
Cash provided by (used in) operating activities	$ (32,006)	$ (33,215)	$ (9,243)	$ 20,313
Cash provided by (used in) investing activities	27,233	6,363	7,020	(22)
Cash provided by (used in) financing activities	172	1,735	(30)	109,680
Net increase (decrease) in cash and cash equivalents	$ (4,601)	$ (25,117)	$ (2,253)	$129,971

Cash Provided by (Used in) Operating Activities

Net cash used in operating activities was $32.0 million for the year ended December 31, 2019 and $33.2 million for the year ended December 31, 2020. Net cash used in operating activities was $9.2 million for the three months ended March 31, 2020 and net cash provided by operating activities was $20.3 million for the three months ended March 31, 2021.

Cash used in operating activities in the year ended December 31, 2019 was primarily due to our net loss for the year of $23.4 million adjusted by non-cash charges and net changes in our net operating assets and liabilities. Our non-cash charges were comprised of $1.2 million of stock-based compensation and $0.8 million of depreciation and amortization expense, which were offset by a change in fair value of equity securities of $2.3 million. The changes in our net operating assets and liabilities were primarily due to a decrease of $7.1 million in deferred tax liabilities, an increase of $1.3 million in prepaid expenses and other current assets, an increase of $0.8 million in contract assets, an increase of $0.9 million in other receivables, an increase of $0.7 million in accrued expenses and other current liabilities and an increase of $0.4 million in other liabilities, partially offset by a decrease of $0.6 million in accounts receivable, an increase of $1.2 million in accounts payable, a decrease of $0.8 million in deferred revenue and a decrease of $0.3 million in other assets.

Cash used in operating activities in the year ended December 31, 2020, was primarily due to our net loss for the period of $34.3 million adjusted by non-cash charges and net changes in our net operating assets and liabilities. Our non-cash charges included $1.0 million of stock-based compensation expense, $0.9 million of depreciation expense, $0.8 million of change in fair value of equity securities, and $2.7 million for the fair value of the MSKCC success payments liability, which were offset by $7.6 million of non-cash consideration for

licensing and collaboration revenue. Acquired in-process research and development of $3.1 million includes $2.1 million of non-cash consideration and $1.0 million of cash consideration reported in our investing activities. The changes in our net operating assets and liabilities were primarily due to an increase of $2.3 million in accrued expenses and other current liabilities, a decrease of $0.4 million in prepaid expenses and other current assets, partially offset by an increase of $0.5 million in contract assets, an increase of $0.5 million in other receivables, a decrease of $0.6 million in deferred revenue, and a decrease of $0.5 million in deferred tax liabilities.

Cash used in operating activities in the three months ended March 31, 2020 was primarily due to our net loss for the quarter of $9.8 million adjusted by non-cash charges and net changes in our net operating assets and liabilities. Our non-cash charges were comprised of a change in fair value of equity securities of $0.7 million, $0.2 million of stock-based compensation, and $0.2 million of depreciation and amortization expense. Acquired in-process research and development of $0.4 million included $0.4 million of cash consideration reported in our investing activities. The changes in our net operating assets and liabilities were primarily due to a decrease of $1.2 million in prepaid expenses and other current assets, an increase of $0.6 million in accrued expenses and other current liabilities, and a decrease of $0.3 million in contract assets, partially offset by a decrease of $1.0 million in accounts payable and an increase of $0.5 million in other receivables and a decrease of $0.4 million in deferred revenue.

Cash provided by operating activities in the three months ended March 31, 2021 was primarily due to a $30.0 million upfront payment received from AbbVie pursuant to our License and Collaboration Agreement recorded as deferred revenues, partially offset by a net loss for the quarter of $13.2 million. Our non-cash charges were comprised of a change in the fair value of the MSKCC success payments liability of $0.7 million, $0.3 million of stock-based compensation, and $0.2 million of depreciation and amortization expense. The changes in our net operating assets and liabilities were primarily due to an increase of $3.9 million in accrued expenses and other current liabilities and a $0.4 million decrease in contract assets, partially offset by an increase of $1.1 million in other receivables, an increase of $0.6 million in prepaid expenses and other current assets, and an increase of $0.4 million in other assets.

Cash Provided by (Used in) Investing Activities

During the years ended December 31, 2019 and 2020, cash provided by investing activities was $27.2 million and $6.4 million, respectively. During the three months ended March 31, 2020, net cash provided by investing activities was $7.0 million, and during the three months ended March 31, 2021 net cash used in investing activities was less than $0.1 million.

Cash provided by investing activities for the year ended December 31, 2019 was primarily due to our receipt of $28.1 million in proceeds from the sale of our investment in Intellia common stock, offset by purchases of property and equipment of $0.9 million.

Cash provided by investing activities for the year ended December 31, 2020 was primarily due to our receipt of $7.7 million in proceeds from the sale of our investment in Intellia common stock, offset by cash paid for the acquisition of in-process research and development of $1.0 million and purchases of property and equipment of $0.3 million.

Cash provided by investing activities for the three months ended March 31, 2020 was primarily due to our receipt of $7.7 million in proceeds from the sale of our investment in Intellia common stock partially offset by purchases of property and equipment of $0.2 million and payments of $0.4 million to acquire in-process research and development. Since March 31, 2020, we do not hold any Intellia common stock.

Cash used in investing activities for the three months ended March 31, 2021 was primarily due to purchases of property and equipment in the amount of less than $0.1 million.

Cash Provided by (Used in) Financing Activities

During the years ended December 31, 2019 and 2020, cash provided by financing activities was $0.2 million and $1.7 million, respectively. During the three months ended March 31, 2020, cash used in financing activities was less than $0.1 million and, during the three months ended March 31, 2021, cash provided by financing activities was $109.7 million.

Cash provided by financing activities for the year ended December 31, 2019 was primarily due to our receipt of proceeds from common stock options exercised of $0.2 million.

Cash provided by financing activities for the year ended December 31, 2020 was primarily due to our receipt of proceeds from the issuance of the promissory note of $1.6 million related to our PPP loan. On May 22, 2021, our PPP loan was forgiven in full.

Cash used in financing activities for the three months ended March 31, 2020 was primarily due to payments under capital lease agreement in the amount of less than $0.1 million.

Cash provided by financing activities for the three months ended March 31, 2021 was primarily due to our receipt of net proceeds from the issuance of Series C preferred stock in the amount of $109.2 million and proceeds from common stock options exercised of $0.6 million, partially offset by the repayments of capital lease obligation in the amount of $0.1 million.

Contractual Obligations and Commitments

The following summarizes our contractual obligations as of December 31, 2020:

	Due by Period				
	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years	Total
	(in thousands)				
Operating leases(1)	$ 2,610	$ 5,461	$ 5,601	—	$ 13,672
Promissory note(2)	666	932	—	—	1,598
Total obligations(3)	$ 3,276	$ 6,393	$ 5,601	—	$ 15,270

(1) The operating lease obligations are primarily related to the facility lease for our corporate headquarters and research and development facility in Berkeley, California, expiring in 2025 and any extension or termination provisions, as relevant.
(2) The amounts reported for the promissory note represent future minimum payments for our PPP loan.
(3) Excludes payment obligations under our in-license and assignment agreements as of December 31, 2020, which are contingent upon our achievement of pre-defined clinical, regulatory, and commercial milestones; changes in the price of our common stock; a change in control; and royalties on net product sales. See the section titled “Business—Strategic Agreements” for more information about these payment obligations.

The following summarizes our contractual obligations as of March 31, 2021:

	Due by Period				
	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years	Total
	(in thousands)				
Operating leases(1)	$ 3,406	$ 7,136	$ 7,620	$ 26,168	$ 44,330
Promissory note(2)	666	932	—	—	1,598
Total obligations(3)	$ 4,272	$ 7,868	$ 7,620	$ 26,168	$ 45,928

(1) The operating lease obligations are primarily related to the facility lease for our corporate headquarters and research and development facility in Berkeley, California, expiring in 2031 and any extension or termination provisions, as relevant.
(2) The amounts reported for the promissory note represent future minimum payments for PPP loan. Our PPP loan was forgiven on May 22, 2021 by the SBA.
(3) Excludes payment obligations under our in-license and assignment agreements as of March 31, 2021, which are contingent upon our achievement of pre-defined clinical, regulatory, and commercial milestones; in the case of MSKCC changes in the price of our common stock and any change in control; and royalties on net product sales. See the section titled "Business—Strategic Agreements" for more information about these payment obligations.

The operating lease obligations are primarily related to the facility lease for our corporate headquarters and research and development facility in Berkeley, California. On March 31, 2021, this lease agreement was amended to include additional office and laboratory space and extend the lease term to March 31, 2031.

Other Contractual Obligations

We enter into contracts in the normal course of business with suppliers, CMOs, CROs, clinical trial sites and the like.

These agreements provide for termination at the request of either party with less than one-year notice and therefore we believe that our non-cancelable obligations under these agreements are not material and they are not included in the table above.

We have not included milestones, royalty or other payments due under our existing license agreements in the table above due to the uncertainty of the occurrence of the events requiring payment under those agreements. See "Business—Strategic Agreements."

We entered into an Exclusive License Agreement with MSKCC in November 2020, under which we exclusively licensed certain know-how, materials and intellectual property in a specified field related to our CB-012 program. We are obligated to make success payments to MSKCC of up to $35.0 million if our stock price increases by certain multiples of increasing value based on a comparison of the fair market value of our common stock compared with $9.4379 per share, which was the price at which our Series B convertible preferred stock was sold, as adjusted for any stock splits, during a specified time interval. The relevant time interval commences the first patient is dosed with our CB-012 product candidate in the first phase 1 clinical trial and ends upon the earlier of the third anniversary of approval of our biologics license application, or BLA, by the FDA or 10 years from the date the first patient was dosed with CB-012 in the first phase 1 clinical trial. Additionally, if we undergo a change of control during the specified time interval, a change of control payment may be owed, depending upon the increase in our stock price due to the change of control and also to what extent success payments have already been paid. In no event will the combination of success payments and the change of control payment exceed $35.0 million. The relevant time period during which MSKCC is eligible for success payments and a change of control payment has not yet commenced; thus, this offering will not trigger any such payments. As of December 31, 2020 and March 31, 2021, the timing and likelihood of triggering success payments are uncertain and therefore any related payments are not included in the tables above. See "Business—Strategic Agreements—Memorial Sloan Kettering Cancer Center (MSKCC)" and the subsection titled "—MSKCC Success Payments Liability" within "Critical Accounting Polices and Estimates" section below.

Off-Balance Sheet Arrangements

During the periods presented, we did not have, nor do we currently have, any off-balance sheet arrangements as defined under applicable SEC rules.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities.

We had cash and cash equivalents of $16.0 million as of December 31, 2020 and $145.9 million as of March 31, 2021, which consisted of bank deposits and money market mutual funds. The primary objective of our investment activities is to preserve capital to fund our operations while earning a low-risk return. Because our money market mutual funds are short-term in duration, we believe that our exposure to interest rate risk is not significant, and a hypothetical 1% change in market interest rates during any of the periods presented, would not have had a significant impact on the total value of our portfolio.

We are not currently exposed to significant market risk related to changes in foreign currency exchange rates; however, we have contracted with and may continue to contract with vendors that are located outside of the United States and our operations may be subject to fluctuations in foreign currency exchange rates in the future.

Inflation generally affects us by increasing our cost of labor and research and development costs. We do not believe that inflation had a material effect on our business, results of operations, or financial condition during the years ended December 31, 2019 and 2020 and during the three months ended March 31, 2020 and 2021.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements and interim condensed consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles, or GAAP. The preparation of these consolidated financial statements and interim condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and interim condensed consolidated financial statements, as well as the reported expenses incurred during the reporting periods. These estimates and assumptions are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates and assumptions could occur in the future. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more details in Note 2 to each of our consolidated financial statements and interim condensed consolidated financial statements included elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements and interim condensed consolidated financial statements.

Revenue Recognition

We recognize revenue when a licensee or assignee, or a customer, obtains control of the promised goods or services (*e.g.*, an intellectual property license), in an amount that reflects the consideration that we have received or expect to receive in exchange for those goods or services.

We apply judgment to determine whether agreements are within the scope of revenue for customers or other accounting guidance at an agreement's effective date. Our revenues are primarily derived through our license agreements and license and collaboration agreements. The terms of these types of agreements may include (i) licenses for our technology, (ii) research and development services, and (iii) services or obligations in connection with participation in research or steering committees. Payments to us under these arrangements typically include one or more of the following: nonrefundable upfront license or exclusivity fees; annual maintenance fees; regulatory and/or commercial milestone payments; research and development payments; and royalties on the net sales of licensed products and/or services.

We assess whether the promises in our arrangements with customers are considered as distinct performance obligations that should be accounted for separately. Judgment is required to determine whether the license to intellectual property is distinct from the research and development services or participation on steering committees.

If the license to intellectual property controlled by us is determined to be distinct from the other performance obligations identified in the arrangement, we recognize revenues allocated to the license at the point in time when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are combined with other promises, we utilize our judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition.

Certain of our license agreements have two performance obligations: a license and a material right for annual license renewals. Such license agreements require payments of non-refundable annual license fees by the licensees (referred to as maintenance fees in the license agreements), which are accounted for as material rights for license renewals. We recognize revenue when the license is delivered and the term commences. Revenue for the material right for license renewals is recognized at the point in time the annual license fee is paid by the licensee and the renewal period begins.

Our collaboration and license agreements may include contingent milestone payments. Such milestone payments are typically payable when the collaboration partner or licensee achieves certain predetermined clinical, regulatory, and/or commercial milestones. Milestone payments that are not within our or the licensee’s control, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. At each reporting date, we re-evaluate whether the milestones are considered probable of being achieved and estimate the amount to be included in the transaction price by using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price in such period of determination.

Our collaboration and license agreements may also include contingent payments related to sales-based milestones. Sales-based milestones are typically payable when annual sales of a covered product reach specified levels. Sales-based milestones are recognized at the later of when the associated performance obligation has been satisfied or when the sales occur. Unlike other contingency payments, such as regulatory milestones, sales-based milestones are not included in the transaction price based on estimates at the inception of the contract, but rather, are included when the sales or usage occur.

Research and Development Expenses and Accrued Liabilities

Research and development expenses are charged to expense as incurred. Research and development expenses include certain payroll and personnel expenses; laboratory supplies; consulting costs; external clinical research and development expenses; and allocated overhead, including rent, equipment depreciation, and utilities.

We record accrued liabilities for estimated costs of research and development activities conducted by third-party service providers, CROs, and CMOs. We accrue for these costs based on factors such as estimates of the work completed and in accordance with service agreements established with these third-party service providers.

We make significant judgments and estimates in determining the accrual balance in each reporting period. As actual costs become known, we adjust our accruals. Although we do not expect our estimates to be materially different than the actual amounts incurred, such estimates for the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in us reporting amounts that are too high or too low in any one period. Our accrual is dependent, in part, upon the receipt of timely and accurate reporting from CROs, CMOs, and other third-party vendors. Variations in the assumptions

used to estimate accruals including, but not limited to, the number of patients enrolled, the rate of patient enrollment and the actual services performed, may vary from our estimates, resulting in adjustments to clinical trial expenses in future periods. Changes in these estimates that result in material changes to our accruals could materially affect our financial condition and results of operations.

Stock-Based Compensation Expense

Stock-based compensation expense related to awards to employees is measured at the grant date based on the fair value of the award. The fair value of the award that is ultimately expected to vest is recognized as expense on a straight-line basis over the requisite service period of the awards, which is generally the vesting period, and is adjusted for pre-vesting forfeitures in the period in which the forfeitures occur.

We use the Black-Scholes valuation model as the method for determining the estimated fair value of stock-based awards.

Expected Term—Expected term represents the period that our stock-based awards are expected to be outstanding and is determined using the simplified method.

Expected Volatility—Expected volatility is estimated by studying the volatility of comparable public companies for similar terms.

Expected Dividend—The Black-Scholes valuation model calls for a single expected dividend yield as an input. To date, we have not declared or paid any dividends.

Risk-Free Interest Rate—The risk-free interest rate is based on the U.S. Treasury zero-coupon issued in effect at the time of grant for periods corresponding with the expected term of the option.

Stock-based compensation expense related to awards to non-employees, such as consultants, is recognized based on the then-current fair value at each grant date over the associated service period of the award, which is generally the vesting term, using the straight-line method. The fair value of non-employee stock options is estimated using the Black-Scholes valuation model with assumptions generally consistent with those used for employee stock options, with the exception of the expected term, which is the remaining contractual life at each measurement date. See Note 12 in each of our consolidated financial statements and interim condensed consolidated financial statements included elsewhere in this prospectus for more information on assumptions used in estimated stock-based compensation expense.

We recorded share-based compensation expense of $1.2 million and $1.0 million for the years ended December 31, 2019 and 2020, respectively, and $0.2 million and $0.3 million for the three months ended March 31, 2020 and 2021, respectively. As of December 31, 2020, there was $2.1 million of total unrecognized compensation expense, which we expect to recognize over a remaining weighted-average period of 1.2 years. As of March 31, 2021, there was $6.0 million of total unrecognized compensation expense, which we expect to recognize over a remaining weighted-average period of 1.7 years. We expect to continue to grant equity-based awards in the future, and to the extent that we do, our share-based compensation expense recognized in future periods will likely increase.

The intrinsic value of all outstanding incentive awards as of , 2021 was $ million based on the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, of which approximately $ million was related to vested incentive shares and approximately $ million was related to unvested incentive shares.

Fair Value of Common Stock

The fair value of the common stock underlying our equity awards was determined by management, considering input from third-party valuation analyses, and approved on each grant date by our board of directors.

In determining the fair value of our common stock, the methodologies used to estimate the enterprise value are performed using methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation, or the Practice Aid. Our management's approach to estimate the fair value of our common stock considers a number of objective and subjective factors including valuations of our common stock performed with the assistance of independent third-party valuation specialists; our stage of development and business strategy, including the status of research and development efforts and the material risks relating to the business and industry; our results of operations and financial position, including levels of available capital resources; the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies; the lack of marketability of our common stock; the prices of convertible preferred shares sold to investors in arm's length transactions and the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock; and the likelihood of achieving a liquidity event for the holders of the common and convertible preferred stock, such as an initial public offering or a sale, given prevailing market conditions.

For our valuations performed on and prior to December 31, 2020, we utilized an Option Pricing Method, or OPM, based analysis, primarily the OPM Backsolve methodology, to determine the estimated fair value of our common stock. We determined this was the most appropriate method for determining the fair value of our common stock based on our stage of development and other relevant factors. Within the OPM framework, the Backsolve method for inferring the total equity value implied by a recent financing transaction involves the construction of an allocation model that takes into account our capital structure and the rights and preferences of each class of shares, then assumes reasonable inputs for the other OPM variables (expected time to liquidity, volatility, risk-free rate, etc.). The total equity value is then iterated in the model until the model output value for the equity class sold in a recent financing round equals the price paid in that round. The OPM is generally utilized when specific future liquidity events are difficult to forecast, *e.g.*, the entity has many choices and options available, and the entity's value depends on how well it follows an uncharted path through the various possible opportunities and challenges. If a recent financing was more than one year from the valuation date, we adjusted our equity value for reasonable market adjustments by taking into account our internal progress towards our business plans. In determining the estimated fair value of our common stock, management also considered the fact that our common stock cannot be freely traded in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock on the weighted-average expected time to liquidity. The estimated fair value of our common stock at each valuation date reflected a non-marketability discount partially based on the anticipated likelihood and timing of a future liquidity event.

For our valuations performed after December 31, 2020, we utilized a hybrid method that combines the Probability-Weighted Expected Return Method, or PWERM, an accepted valuation method described in the Practice Aid, and the OPM. We determined this was the most appropriate method for determining the fair value of our common stock based on our stage of development and other relevant factors. The PWERM is a scenario-based analysis that estimates the value per share of common stock based on the probability-weighted present value of expected future equity values for the common stock, under various possible future liquidity event scenarios, considering the rights and preferences of each class of shares, discounted for a lack of marketability. Under the hybrid method, an OPM Backsolve was utilized to determine the fair value of our common stock in certain of the PWERM scenarios (capturing situations where our development path and future liquidity events were difficult to forecast) and potential initial public offering exit events were explicitly modeled in the other PWERM scenarios. A discount for lack of marketability was applied to the value derived under each scenario to account for a lack of access to an active public market.

The assumptions underlying these valuations represented our management's best estimates, which involved inherent uncertainties and the application of management's judgment. As a result, if we had used significantly different assumptions or estimates, the fair value of our common stock and our stock-based compensation expense could have been materially different. Following the closing of this offering, our board of

directors will determine the fair market value of our common stock based on its closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

MSKCC Success Payments Liability

Under our MSKCC Exclusive License Agreement, we are obligated to make success payments and a change of control payment to MSKCC of up to $35.0 million, as discussed above. The liability associated with these potential success payments is accounted for at fair value as long-term liability. The nature of the success payments liability is a contingent consideration for the MSKCC license and, as such, it is accounted for as research and development expenses. The success payments liability is estimated at fair value at inception and at each subsequent balance sheet date, and changes in the fair value of the liability are included in operating expenses in our consolidated statements of operations and comprehensive loss and interim condensed consolidated statements of operations and comprehensive loss. Changes in fair value of the success payments liability were insignificant for the year ended December 31, 2020. As of the December 31, 2020 valuation measurement date, the fair value of this success payments liability was determined to be $2.7 million. Change in fair value of the success payments liability was $0.7 million for the three months ended March 31, 2021. As of the March 31, 2021 valuation measurement date, the fair value of this success payments liability was determined to be $3.3 million.

To determine the estimated fair value of the MSKCC success payments liability, we use a Monte Carlo simulation methodology, which models the future movement of our stock price based on several key variables. The following variables were incorporated in the estimated fair value of the success payments liability: estimated term of the success payments, fair value of common stock, expected volatility, risk-free interest rate, and estimated number and timing of valuation measurement dates on the basis of which payments may be triggered. The computation of expected volatility was estimated using a combination of available information about the historical volatility of stocks of similar publicly traded companies for a period matching the expected term assumption and its historical and projected volatility. There are several valuation measurement dates that will occur subsequent to this offering, on the basis of which payments may be triggered.

Income Taxes

We account for income taxes using the asset and liability method. We recognize deferred tax assets and liabilities for the expected future tax consequences of events that have been included in our consolidated financial statements and interim condensed consolidated financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the consolidated financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Tax benefits related to uncertain tax positions are recognized when it is more likely than not that a tax position will be sustained during an audit. Interest and penalties related to unrecognized tax benefits are included within the provision for income tax.

Recently Issued Accounting Pronouncements

See Note 2 to each of our consolidated financial statements and interim condensed consolidated financial statements included elsewhere in this prospectus for more information regarding recently issued accounting pronouncements.

Indemnification Agreements

As permitted under Delaware General Corporation Law and in accordance with our amended and restated bylaws, we indemnify our executive officers and directors for certain events or occurrences while the executive officer or director is or was serving in such capacity. We are also party to indemnification agreements

with our executive officers and directors. We believe the fair value of the indemnification rights and agreements is minimal. Accordingly, we have not recorded any liabilities for these indemnification rights and agreements as of March 31, 2021.

Emerging Growth Company and Smaller Reporting Company Status

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our consolidated financial statements and interim condensed consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

We expect to use the extended transition period for any other new or revised accounting standards during the period in which we remain an emerging growth company. As described in “Recently adopted accounting pronouncements” in our consolidated financial statements and interim condensed consolidated financial statements included elsewhere in this prospectus, we early adopted multiple accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies to the extent early adoption is allowed by the accounting standard.

We may also qualify as a “smaller reporting company,” meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering may be less than $700 million and our annual revenue is less than $100 million during the most recently completed fiscal year. If we qualify as a “smaller reporting company,” we may continue to be a smaller reporting company after this offering so long as either (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue is less than $100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million.

If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, if we qualify as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

BUSINESS

Overview

We are a clinical-stage biopharmaceutical company dedicated to transforming the lives of patients with devastating diseases by applying our novel CRISPR platform, **C**RISPR **h**ybrid **R**NA-**DNA**, or chRDNA, pronounced "chardonnay," toward the development of next-generation, genome-edited cell therapies. Our renowned founders, including a Nobel laureate, are pioneers in CRISPR genome editing. Our chRDNA technology has demonstrated superior specificity and high efficiency in preclinical studies, which enables us to perform multiple, precise genomic edits, while maintaining genomic integrity.

We believe that our technology has broad potential to generate gene and cell therapies in oncology and in therapeutic areas beyond oncology, including immune cell therapies, cell therapies derived from genome-edited induced pluripotent stem cells, or iPSCs, and *in vivo* genome-editing therapies.

The genome-editing technologies currently used in the allogeneic cell therapy field generally have limited efficiency, specificity, and versatility for performing the multiple, precise genomic edits necessary to address insufficient persistence. Our chRDNA technology is designed to address these genome-editing limitations and improve cell therapy activity. By applying this approach to allogeneic cell therapies, we believe we can unlock their full potential by improving upon their effectiveness and durability.

We are initially focused on advancing multiple proprietary allogeneic cell therapies for the treatment of both hematologic malignancies and solid tumors against cell surface targets for which autologous CAR-T cell therapeutics have previously demonstrated clinical proof of concept, including both CD19 and B cell maturation antigen, or BCMA, as well as new targets. We use our chRDNA technology to enhance, or armor, our cell therapies by creating additional genomic edits to improve persistence of antitumor activity.

Our first lead product candidate, CB-010, is, to our knowledge, the first clinical-stage allogeneic anti-CD19 chimeric antigen receptor T cell, or CAR-T cell, therapy with programmed cell death protein 1, or PD-1, removed from the CAR-T cell surface by a genome-edited knockout of the *PDCDI* gene. We have demonstrated in preclinical models that the PD-1 knockout improves the persistence of antitumor activity by disrupting a pathway that leads to rapid T cell exhaustion. CB-010 is being evaluated in a phase 1 clinical trial in patients with relapsed or refractory B cell non-Hodgkin lymphoma, or B-NHL, with initial data expected in 2022.

Our second lead product candidate, CB-011, is an allogeneic CAR-T cell product candidate, and is, to our knowledge, the first anti-BCMA CAR-T cell therapy incorporating an immune cloaking approach that includes both the removal of the endogenous beta-2 microglobulin, or B2M, protein and insertion of a beta-2-microglobulin–human-leukocyte-antigen-E–peptide, or B2M–HLA-E, transgene. This strategy is designed to blunt CAR-T cell rejection by both patient T cells and natural killer, or NK, cells to enable more durable antitumor activity. CB-011 is in preclinical development for relapsed or refractory multiple myeloma, or MM, with an investigational new drug, or IND, filing expected in 2022.

CB-012 is an allogeneic armored CAR-T cell product candidate targeting CD371, currently in preclinical development for the treatment of relapsed or refractory acute myeloid leukemia, or AML, with an IND filing expected in 2023. CD371 is an attractive target for AML due to its expression on myeloid cancer cells, its enrichment in leukemic stem cells, and its absence on hematopoietic stem cells.

We are also developing allogeneic CAR-NK cell therapies derived from genome-edited iPSCs for the treatment of solid tumors. These CAR-NK products will contain genomic edits designed to overcome the challenges of targeting solid tumors, including trafficking, heterogeneity, and the immunosuppressive tumor microenvironment.

We control a robust patent portfolio protecting our chRDNA technology as well as certain of our allogeneic cell therapy targets.

In February 2021, we entered into a collaboration with AbbVie Manufacturing Management Unlimited Company, or AbbVie, to develop two new CAR-T cell therapies for AbbVie. We view this collaboration as an external recognition of the potential for our chRDNA genome-editing technology to significantly improve genome-editing specificity and efficiency.

Current Challenges in Allogeneic Cell Therapies

Immune cell therapies have emerged as a revolutionary and potentially curative treatment for hematologic malignancies and solid tumors. The approval and launch of multiple first generation CD19- or BCMA-directed autologous CAR-T cell products have laid the foundation and opened a path for the development of more advanced cell therapeutics, including CAR-T and CAR-NK cell products with next-generation capabilities and approaches. Among these approaches, allogeneic cell therapy is positioned to unlock the broad potential of engineered immune cells as a leading therapeutic modality. However, expansion, persistence, and trafficking of allogeneic CAR-T and CAR-NK cells are critical to achieving long-term efficacy. We believe that the genome-editing technologies currently utilized in the allogeneic cell therapy field have limited efficiency, specificity, and versatility for performing the multiplex editing necessary to address these challenges.

Genome-Editing Landscape and Limitations

There are several well-established genome-editing technologies being applied to generate immune cell therapies currently in preclinical research or clinical development, including zinc-finger nucleases, or ZFNs, transcription activator-like effector nucleases, or TALENs, and meganucleases, but each has limitations with respect to both their agility and their ability to generate site-specific gene insertions with high efficiency. More recently, clustered regularly interspaced short palindromic repeats, or CRISPR, genome-editing technology has been used for the generation of *ex vivo* immune cell therapeutics that are in preclinical research or clinical development.

The canonical CRISPR system utilizes Cas9, a protein that can cut genomic DNA. Cas9 is targeted to a specific site in a genome by a guide RNA. One of the drawbacks of CRISPR-Cas9 genome editing is the occurrence of off-target editing. Off-target edits can alter an oncogene or tumor suppressor gene, impact the biology of the target cell, or have other negative consequences on therapeutic development. Additionally, the simultaneous occurrence of both on-target and off-target edits may lead to genomic rearrangements including chromosomal translocations that may be problematic for immune cell therapeutics, especially for ones requiring multiple edits.

Our chRDNA Technology

We have invented a new CRISPR genome-editing platform, our chRDNA technology, which uses novel and proprietary hybrid guides for editing DNA, providing a powerful tool with the potential to expand the use of allogeneic cell therapies. The advantages of our technology include:

- *Significantly improved genome-editing specificity*: The use of our chRDNA guides leads to a high degree of editing specificity with lower levels of off-target events compared to first generation CRISPR-Cas9. See figure 6.

- *High efficiency*: We achieve a high degree of on-target gene knockout and insertion efficiency, facilitating robust multiplex editing including multiple gene insertions. See figure 6.

- *Versatility across a broad range of cell types*: Our chRDNA guides are compatible with multiple types of Cas proteins, including Cas9 and Cas12a, providing us the flexibility to apply our technology to many cell types including immune cells and stem cells.

- *Simple chemical synthesis*: Our chRDNA guides are manufactured via chemical synthesis using readily available technologies.

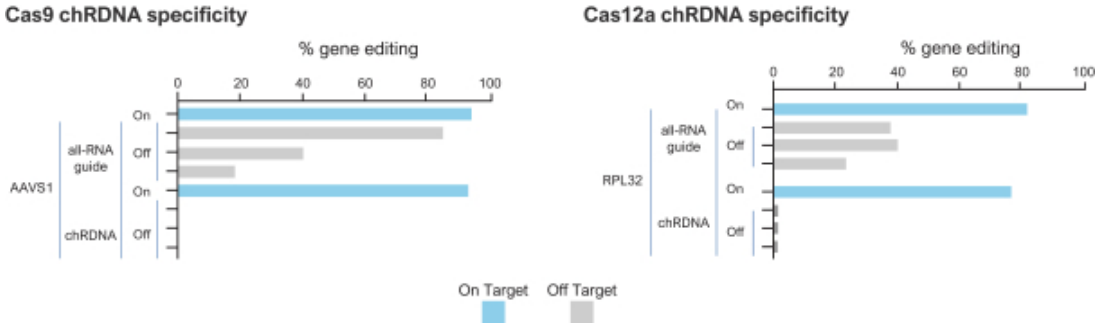

Figure 6. *chRDNA guides significantly improve genome-editing specificity relative to all-RNA guides. We edited the AAVS1 and RPL32 genes using either an all-RNA guide or a chRDNA guide targeting the same genomic location. In these cases the all-RNA guides result in multiple, high efficiency off-target edits, whereas the chRDNA guides yield minimal or undetectable off-target edits.*

We have successfully demonstrated multiplex genome editing with our chRDNA technology, including multiplex gene insertion. We believe this level of editing sophistication has the potential to unlock the broad use of allogeneic cell therapies by:

- *Increasing the persistence of allogeneic cell therapies, thereby potentially achieving long-term efficacy:* Our chRDNA technology enables us to apply multiple orthogonal approaches to armor allogeneic CAR-T cells, including (i) knockout of PD-1 to disrupt a pathway that leads to CAR-T cell exhaustion and (ii) immune cloaking CAR-T cells to prevent rapid rejection by the patient's immune system. See figure 7. Our preclinical mouse xenograft data demonstrate that the PD-1 knockout results in a significant survival advantage compared to conventional allogeneic CAR-T cells without a PD-1 knockout. See figure 8.

- *Improving the genomic integrity of our products*: We have observed that our product candidates have significantly lower levels of off-target edits compared to those made with first generation CRISPR-Cas9, and we believe we can make multiple edits while maintaining genomic integrity.

- *Expanding into solid tumors*: We are also focused on developing genome-edited, off-the-shelf CAR-NK cell therapies for the treatment of solid tumors. In our studies to date, we have observed that our chRDNA technology can precisely edit iPSCs and through a proprietary process, we generate genome-edited, iPSC-derived NK cells, or iNKs, that are armored to enhance efficacy, trafficking, targeting, and/or persistence.

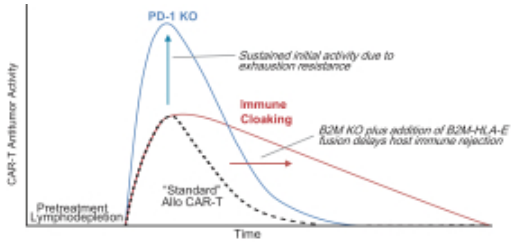

Figure 7*. We employ multiple armoring strategies to improve allogeneic CAR-T cell persistence.*

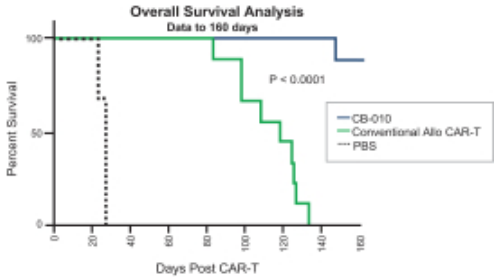

Figure 8*. In vivo preclinical mouse xenograft data demonstrate that the PD-1 knockout results in a significant survival advantage relative to a conventional allogeneic CAR-T cell therapy that expresses PD-1.*

Our Pipeline

Proprietary pipeline

Program	Cell type	Target	Editing	Indications	Discovery	IND enabling	Phase 1	Phase 2	Phase 3*	Anticipated milestones
CB-010	T cell	CD19	CAR into TRAC armoring: PD-1 KO	r/r B-NHL	●	●	●	○	○	initial data expected in 2022
CB-011	T cell	BCMA	CAR into TRAC armoring: B2M KO, B2M-HLA-E insertion	r/r MM	●	○	○	○	○	IND filing 2022
CB-012	T cell	CD371	armoring	r/r AML	●	○	○	○	○	IND filing 2023
CB-020	iNK cell	undisclosed	armoring	solid tumors	●	○	○	○	○	target selection 2022

* Phase 3 may not be required if phase 2 is registrational.

Figure 9. *Caribou is developing a robust oncology pipeline of immune cell therapies.*

CB-010

Our most developed product candidate is CB-010, an allogeneic anti-CD19 CAR-T cell therapy. See figure 10. We use Cas9 chRDNA guides to make three edits to manufacture CB-010. We introduce, with high efficiency and specificity, the gene encoding the CD19-specific CAR into the gene encoding the T cell receptor alpha constant, or *TRAC*, a component of the native T cell receptor, or TCR. This simultaneously integrates the CD19 CAR site-specifically into the T cell genome and eliminates TCR expression to reduce the risk of graft versus host disease, or GvHD. We also knock out the gene encoding the PD-1 protein in these cells to boost the persistence of CAR-T cell antitumor activity. We believe that the PD-1 knockout has the potential to reduce the likelihood of rapid tumor recurrence and potentially confer a better therapeutic index compared to other

allogeneic CAR-T cells. To our knowledge, CB-010 is the first allogeneic CAR-T cell therapy with a PD-1 knockout in clinical studies and it is being evaluated in our open-label, multicenter ANTLER phase 1 clinical trial in the United States in adults with relapsed or refractory B-NHL (NCT04637763). We have dosed the first patient in this clinical trial. We expect to have initial data from this clinical study in 2022.

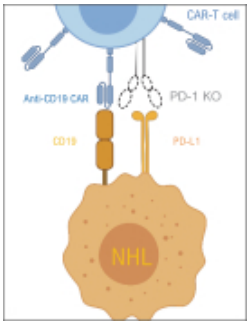

Figure 10. *CB-010 is a healthy donor leukapheresis-derived CAR-T cell targeting the CD19 tumor antigen.*

CB-011

CB-011 is an allogeneic, anti-BCMA CAR-T cell therapy for the treatment of relapsed or refractory MM. See figure 11. To our knowledge, CB-011 will be the first allogeneic CAR-T cell therapy immune cloaked to prevent both T- and NK-mediated clearance, or rejection, by the immune system. We expect our immune cloaking strategy to drive CAR-T cell persistence, enabling more durable antitumor activity. We use Cas12a chRDNA guides to make four edits to manufacture CB-011. We introduce the gene that encodes a novel and proprietary humanized anti-BCMA CAR into the *TRAC* locus with high specificity and efficiency, thus eliminating TCR expression to prevent GvHD and integrating the BCMA CAR site-specifically into the T cell genome. In addition, we insert a gene encoding a B2M–HLA-E fusion protein into the native *B2M* gene locus. This approach simultaneously prevents the expression of the native B2M protein, a protein that stabilizes all HLA class I antigens on the cell surface, thereby eliminating endogenous HLA class I presentation on the surface of the CAR-T cells, and stably expresses HLA-E, a minor HLA class I antigen, to blunt both T- and NK-mediated rejection of the CAR-T cell therapy by the patient's immune system. We expect to file an IND for this product candidate in 2022.

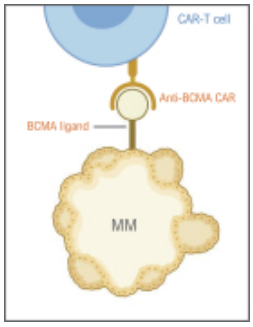

Figure 11. *CB-011 is a healthy donor leukapheresis-derived CAR-T cell targeting the BCMA tumor antigen. It is in the advanced discovery stage and will be developed for clinical evaluation in r/r MM.*

CB-012

CB-012 is an allogeneic, anti-CD371 CAR-T cell therapy for the treatment of relapsed or refractory AML. See figure 12. CD371 is expressed on the surface of AML tumor cells and leukemic stem cells, but it is not expressed on normal hematopoietic stem cells, which makes it a compelling target for the treatment of AML. We are applying our genome-editing expertise to armor the CB-012 CAR-T cell product candidate in order to drive persistence and seek maximum patient benefit in relapsed or refractory AML. We expect to file an IND for this program in 2023.

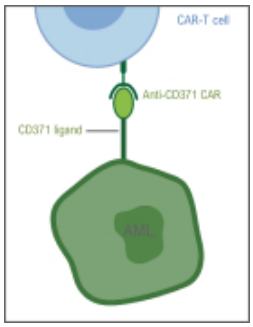

Figure 12. *CB-012 is a healthy donor leukapheresis-derived CAR-T cell targeting the CD371 tumor antigen. It is in the discovery stage and will be developed for clinical evaluation in r/r AML.*

CB-020

We believe that edited iNKs, including CAR-iNKs, hold significant potential for treating a variety of solid tumors. We have successfully demonstrated the ability to edit the genome of iPSCs at multiple loci and we have developed a robust differentiation protocol to derive iNKs from iPSCs, providing an optimal system for generating multiplex-edited iNKs that have the potential to address the fundamental challenges facing immune cell therapies in the immunosuppressive tumor microenvironment.

Our History

Our Team

Our team and our culture are critical to realizing our vision of advancing agile genome-editing innovations for the benefit of our communities. We were founded in 2011 by globally-recognized leaders in CRISPR and nucleic acid biology: Jennifer A. Doudna, Ph.D., who was a co-recipient of the 2020 Nobel Prize in Chemistry for the development of CRISPR-Cas9 as a method for genome editing; Martin Jinek, Ph.D., Assistant Professor at the University of Zurich in the Department of Biochemistry; James Berger, Ph.D., Professor in the Department of Biophysics and Biophysical Chemistry at the Johns Hopkins University School of Medicine; and Rachel E. Haurwitz, Ph.D., who has served as our President and Chief Executive Officer since our founding. Drs. Doudna and Jinek serve on our Scientific Advisory Board, or SAB, which also includes world experts in immuno-oncology therapeutics, T cell metabolism and tumor interactions, iPSC biology and differentiation, clinical trial development, and patient care.

We have attracted a talented group of experienced scientists, drug development experts, and company builders as part of a passionate team of over 65 employees. Throughout their combined careers, our team members have contributed to at least 49 IND submissions; 94 clinical trials, of which 40 were for oncology indications; 13 product approvals; and 11 product launches. Our research and development team includes scientists, engineers, and clinicians who are experts in genome-editing technologies, cellular engineering, computational biology, genome sequencing and analysis, structural biology, chemistry, lab automation, translational medicine, and the manufacturing of CRISPR reagents and cell therapies. Our team includes many of the scientists and engineers who invented the technologies we use today in our research and product development, including Paul Donohoue, a co-inventor of the chRDNA genome-editing technology, who continues to drive innovation as the leader of our platform discovery group.

We are driven by our shared values. We open our minds to new ideas and welcome diverse perspectives. We proudly assert that teams do their best work when their members are personally engaged, their ideas are taken seriously, their contributions are recognized, and their needs are met.

Our Values

- *Leaders in Genome Editing*: Passionate and relentless in our pursuit of innovation
- *Collaboration*: Shaping a better future together
- *Scientific Excellence*: Innovating solutions to advance scientific applications
- *Community Engagement*: Addressing society's needs through open dialogue
- *Integrity*: Operating with the highest level of integrity
- *Personal Development*: Empowering and supporting one another
- *Respectful and Inclusive*: Everyone is a necessary contributor to our success

Our Key Investors and our Financing History

Since our founding in 2011, we have raised approximately $150.1 million in net proceeds from equity capital invested by leading venture capital funds, healthcare-dedicated funds, other institutional investors, and strategic investors to advance our technology platforms and therapeutic pipeline. Our institutional investors include Adage Capital Partners, Anterra F&A Ventures, Avego Bioscience Capital, Avidity Partners, Invus, a fund affiliated with Farallon Capital Management, F-Prime Capital Partners Healthcare Fund IV LP, Heritage Medical Systems, Janus Henderson Investors, Life Sci Venture Partners, Maverick funds, Mission Bay Capital, Monashee Investment Management, funds affiliated with PFM Health Sciences, Point72, Ridgeback Capital Investments, Pontifax Global Food and Agriculture Technology Fund, and funds managed by Tekla Capital Management. Our corporate and strategic investors include AbbVie, DuPont, Genus, The Leukemia & Lymphoma Society Therapy Acceleration Program, and Novartis. Additionally, since our founding, we have received approximately $161.1 million from various licensing, collaboration, patent assignment, and service agreements as well as government grants, including approximately $88.4 million in net proceeds from the sale of Intellia Therapeutics, Inc., or Intellia, common stock received as consideration for our CRISPR-Cas9 license agreement with Intellia and $30.0 million received from AbbVie as an upfront payment for our collaboration and license agreement with AbbVie. Thus, to date, we have received a total of approximately $311.2 million in net proceeds from equity financings and contract revenues.

Intellectual Property

Since our founding in 2011, we have invented and acquired intellectual property covering chRDNA genome editing as well as additional genome-editing and cell therapy technologies. As of the date of this prospectus, we own 48 issued U.S. patents, including 7 U.S. patents covering our chRDNA technology; 209 issued foreign patents; and 93 pending patent applications throughout the world. Our portfolio includes granted U.S. patents covering methods and compositions relating to the anti-BCMA binding domain of our CB-011 product candidate. We have exclusively in-licensed intellectual property covering the anti-CD371 binding domains of our CB-012 product candidate from Memorial Sloan Kettering Cancer Center, or MSKCC. Additionally, we have extensive patent protection on CRISPR Type I systems, CRISPR-Cas9 methods and compositions, and other genome-editing technologies. Without any patent term extension, the earliest expiration dates of our granted U.S. patents are in 2032 and the latest expiration dates of our granted U.S. patents are in 2040. We also rely on trade secrets to protect aspects of our manufacturing that are not amenable to patent protection or infringement detection. We seek to protect these trade secrets and other proprietary technology, in part, by entering into confidentiality agreements with parties who have access to them. We also enter into confidentiality and invention assignment agreements with our employees and our agreements with consultants include invention assignment obligations.

Under an exclusive license agreement with The Regents of the University of California, or UC, and the University of Vienna, or Vienna, we have a worldwide license, with the right to sublicense, in all fields to the foundational CRISPR-Cas9 patent family co-owned by UC, Vienna, and Dr. Emmanuelle Charpentier, or the CVC IP. To date, we have entered into over 20 sublicensing agreements with third parties under which we granted rights to the CVC IP and other Cas9 intellectual property owned or controlled by us in a variety of fields such as human therapeutics, agriculture, research reagents, transgenic animals, certain livestock targets, internal research, bioproduction, cell lines, microbial applications, and forestry.

As of May 31, 2021, our trademark portfolio contains 12 trademark registrations, including four U.S. trademark registrations. We have registered "CARIBOU," "CARIBOU BIOSCIENCES," and the Caribou logo as trademarks in relevant classes and jurisdictions in the United States, European Union, and United Kingdom.

Manufacturing

We have built an efficient and scalable manufacturing process, and our process development organization works with several selected contract manufacturing organizations, or CMOs. Our allogeneic CAR-T cell approach utilizes healthy donor T cells, which we believe provides an enhanced and more cost-effective manufacturing process compared to autologous CAR-T cell manufacturing. In addition, we have optimized the process to achieve a high level of cell recovery and activity through enhanced culture conditions, timing, early stage of differentiation, and use of qualified materials. We have developed analytical methods to ensure high integrity of the CAR-T cells based upon our manufacturing process and quality controls. Furthermore, we will be initiating process development to manufacture iPSCs (adult somatic cells genetically reprogrammed to a stem cell-like state) that will enable us to develop genome-edited, iPSC-derived CAR-NK cell therapeutics for targeting solid tumors.

We rely on CMOs for the manufacture of our product candidates for clinical use, and most of these CMOs have demonstrated capability in preparation of materials for commercialization. We conduct our own process development internally prior to transferring our methodologies to the CMO that manufactures our cGMP cell products. We may build our own manufacturing facility in the future to provide us greater flexibility and control over our clinical and/or commercial manufacturing needs.

Our Strategy

Our purpose is to develop transformative genome editing-based therapies for devastating human diseases. Our goal is to build an integrated company that discovers, develops, manufactures, and commercializes genome editing-based therapies that hold the potential to significantly impact a wide range of diseases.

Key components of our strategy include:

- *Applying our chRDNA platform to the clinically evaluated cell-surface targets CD19 and BCMA to develop allogeneic CAR-T cell therapies with improved persistence of antitumor activity.* We are advancing clinical development of our lead product candidate, CB-010, for relapsed or refractory B cell non-Hodgkin lymphoma as well as research and development for our preclinical product candidate, CB-011, for relapsed or refractory MM. Both product candidates are focused on targets that have been validated in the autologous CAR-T cell therapeutic setting, CD19 and BCMA respectively, providing us appropriate indications with limited target risk in which to evaluate the role of boosted allogeneic CAR-T cell antitumor persistence. CB-010 is being evaluated in our ANTLER phase 1 clinical trial with initial data expected in 2022.

- *Developing additional allogeneic CAR-T cell product candidates for the treatment of hematologic malignancies.* Immune cell therapies have emerged as an exciting and powerful approach for difficult-to-treat hematologic malignancies in patients with limited treatment options. We are applying our chRDNA platform and insights from our more developed programs to create allogeneic CAR-T cell therapies against targets for diseases such as AML, and we plan to use multiple armoring strategies to enhance the persistence and efficacy of our product candidates.

- *Expanding our cell therapy pipeline to include cell therapies for the treatment of solid tumors and metastases by leveraging our iNK cell therapy platform.* We believe NK cells are a promising cell type for the treatment of solid tumors and metastases. We have developed the ability to edit iPSCs and differentiate them into NK cells that have antitumor potential. We intend to pursue targeting multiple types of solid tumors for which there is high unmet medical need.

- *Reinforcing our leadership in CRISPR genome editing through strategic investments in our platform and new technologies.* Our company was founded by leaders in CRISPR biology and its development for use as a platform to generate therapeutics. Our foundation is based on science and innovation protected by a robust IP portfolio and we will continue to invest in and build up these areas to maintain our prominence in the field and to develop therapies in which our genome edits confer potential benefits to patients.

- *Further expanding patient access to our cell therapies via selective strategic collaborations, such as our collaboration with AbbVie.* We executed a strategic license and collaboration agreement with AbbVie in February 2021 to develop two allogeneic CAR-T cell therapies using our Cas12a chRDNA genome-editing and cell therapy technologies. In the future, we may seek additional opportunities with select collaborators as appropriate to accelerate our ability to develop therapeutics to address significant unmet medical need.

- *Pursuing indications both within and outside of oncology on our own and through selective strategic collaborations.* We believe that our technology has broad potential to generate gene and cell therapies in oncology and in therapeutic areas beyond oncology including immune cell therapies, cell therapies derived from genome-edited iPSCs, and *in vivo* genome-editing therapies. We aspire to maximize the value of our technologies and capabilities for patient benefit through internal investment and development and through collaborations.

Cell Therapies for Cancer

Overview of Immune Cell Therapies

Immune cell therapies have emerged as an exciting and powerful approach for difficult-to-treat hematologic malignancies in patients with limited treatment options. These therapies capitalize on the immune system's natural ability to detect and kill tumor cells.

Within the immune system, white blood cells, such as T cells and NK cells, are responsible for defending the body against not only pathogens but also abnormal cells, including cancer cells. Receptors on the surface of T cells enable them to recognize tumor cells and coordinate the activation of other cells in an immune response leading to the destruction of the cancerous cells. However, in many cases, cancer-specific T cells are not present in sufficiently high numbers or do not have the appropriate tumor specificity in a patient to eliminate a tumor.

Autologous immune cell therapies, the most advanced of which use T cells, are a class of therapies in which immune cells are removed from a patient's body and modified to express chimeric antigen receptors, or CARs. CARs are engineered molecules that, when present on the surface of an immune cell, enable the immune cell to recognize specific proteins, or antigens, that are present on the surface of other cells, including cancer cells. To manufacture autologous CAR-T cell therapies, a cancer patient's own T cells are modified to express a particular CAR, grown outside the patient's body to expand their numbers, and then infused back into the same patient to recognize and destroy cancer cells in a targeted manner.

The approval and launch of first generation CD19- and BCMA-directed, autologous CAR-T cell products have laid the foundation and opened a path for the development of more advanced cell therapeutics. The

clinical response rates observed with these therapies were unprecedented, leading to their approval for commercialization based on pivotal, single-arm, phase 2 clinical trials.

Opportunity for Allogeneic Therapies

Despite the successes of autologous CAR-T cell therapies, several limitations have prevented autologous therapies from achieving the full potential of CAR-T products:

- *Limited patient access*. Many patients are not eligible for autologous therapy due to the quality of their T cells or the lengthy vein-to-vein time. Long wait times between the initial collection of the patient's T cells and the return of the modified cells back to the patient often require a difficult intervening bridging treatment.

- *Manufacturing complexity.* Autologous cell manufacturing is complex and lengthy and there are occasional manufacturing failures. The consequence of a manufacturing failure is that a patient might never receive their treatment.

- *Variable potency.* Often patients' T cells can be damaged and weakened due to prior cancer treatments, which may lead to variable potency of the manufactured T cells and variability in outcomes of the therapy.

- *High production costs*. Due to the personalized nature of autologous therapy, as only one patient can be treated from each manufacturing run, the supply chain logistics including manufacturing and delivery result in high costs with limited ability to scale.

Universal off-the-shelf, or allogeneic, versions of CAR-T or CAR-NK cells derived from healthy donors are attractive options for several reasons.

- *Potential for high response rates.* Allogeneic therapies are produced from selected and screened T cells of healthy donors resulting in enhanced cell consistency, potency, and potentially more predictable treatment outcomes.

- *Off-the-shelf availability.* Allogeneic CAR-T cells are manufactured in advance, are stored in inventory, and are available for any eligible patient at any time. Compared to autologous therapies, there is a significantly shortened waiting time, without the need for bridging therapy. In addition, allogeneic cell therapies offer the opportunity for repeated dosing in patients with significant tumor burden.

- *Broad access*. Allogeneic therapies derived from healthy donor cells have the potential to provide therapeutic options for patients who are ineligible for autologous CAR-T cell treatments due to the condition of their T cells.

- *More efficient and cost-effective manufacturing*. Allogeneic approaches utilize cells from healthy donors resulting in a streamlined manufacturing process, enhanced scalability, and cost reduction.

Current Challenges in Allogeneic Cell Therapies

Although allogeneic cell therapy is positioned to unlock the broader potential of engineered immune cells as a leading therapeutic modality, it has not yet achieved the efficacy of autologous therapies. We believe that the expansion and persistence of allogeneic CAR-T cells are critical to achieving long-term efficacy. Unlike autologous CAR-T cell therapies, allogeneic CAR-T cell therapies are prone to rapid rejection by a patient's immune system, thus limiting antitumor activity. Additionally, CAR-T cell therapies have not demonstrated significant and

reproducible efficacy in solid tumors to date. While multiple CAR-T cell approaches are being evaluated in clinical trials for the treatment of solid tumors, the efficacy observed to date is limited and lower than that observed when treating hematologic malignancies. This may be due to poor CAR-T cell trafficking and infiltration into tumors and metastases, and their limited antitumor function within the immunosuppressive tumor microenvironment.

Persistence is the Key to Unlocking the Full Potential of Allogeneic Cell Therapies

We believe greater persistence is necessary for the realization of the full potential of allogeneic cell therapies, as shown in figure 7. CAR-T cells will generally proliferate in response to tumor antigen engagement via their respective CAR. However, allogeneic CAR-T cells are rapidly rejected by a patient's immune system due to their genetically divergent donor-derived immune profile.

Data from patients treated with autologous CAR-T cell therapies suggest that sustained, longer-term remission is associated with the persistence of CAR-T cells. We believe that allogeneic cell therapies must persist in either their antitumor activity before exhaustion or remain in circulation within a patient's bloodstream and lymphatics for an extended period of time, or both, to meaningfully compete with the response rates of autologous cell therapies.

Development of an allogeneic CAR-T cell therapy requires genome editing to remove proteins from donor T cells that may recognize and attack a patient's tissue that, without removal, would pose a risk of graft versus host disease, or GvHD. Further, the donor T cells will express surface proteins that signal that they are "foreign" to the patient's immune system such that they are rapidly rejected by the patient's immune system. We believe allogeneic CAR-T cells must be modified via genome editing to enable them to safely and sufficiently persist to provide therapeutic benefit to rival the response rates of autologous CAR-T cells.

Our Approach: Armor Cell Therapies to Increase the Persistence of Antitumor Activity

We believe that improving CAR-T cell persistence is the key to long-term efficacy in the allogeneic setting. Our strategy to improve CAR-T cell persistence is two-fold: (i) knock out PD-1 to significantly reduce CAR-T cell exhaustion and/or (ii) immune cloak the CAR-T cells to prevent rapid rejection by the patient's immune system. Similar strategies may be used for our CAR-NK platform where persistence will be key for long-term duration of antitumor activity.

PD-1 Knockout Strategy

One of the approaches we deploy to increase the persistence of CAR-T cell antitumor activity is to remove PD-1 from the CAR-T cell surface. The PD-1/PD-L1 pathway leads to rapid exhaustion in T cells. This occurs when a T cell expressing PD-1 engages with another cell expressing PD-L1. Tumor cells and the patient's own cells can express PD-L1, leading to interaction with PD-1 and subsequent exhaustion of the CAR-T cells. We use our chRDNA technology to knock out the PD-1 gene and eliminate PD-1 expression from the CAR-T cell surface, thereby preventing PD-1/PD-L1-mediated exhaustion. We believe that knocking out PD-1 will maintain the CAR-T cells in a higher antitumor state for a longer period of time, and we believe this will result in greater initial tumor debulking in the patient which will lead to long-term durability of CAR-T cell antitumor activity. As shown above in figure 8, our preclinical *in vivo* data from experiments conducted in mouse xenograft models submitted as part of our CB-010 IND demonstrate that knocking out PD-1 leads to a significant increase in the durability of antitumor activity and therefore overall mouse survival. To our knowledge, our lead product candidate is the first allogeneic CAR-T cell therapy in a clinical study with a PD-1 knockout, and we believe will drive the durability of allogeneic CAR-T cell antitumor activity.

Immune-Cloaking Strategy

Another approach we deploy to increase the persistence of CAR-T cell antitumor activity is to immune cloak our CAR-T cells to prevent rapid immune-mediated rejection. The goal of immune cloaking is to maintain

the allogeneic CAR-T cells in circulation for a longer period of time. Allogeneic CAR-T cells are foreign to the patient's immune system and, unless modified, will be rapidly rejected. We use our chRDNA technology to make multiple edits to T cells to immune cloak them and prevent rapid rejection by both the patient's cytotoxic T cells and NK cells. Our edits remove all endogenous HLA class I antigens from the CAR-T surface and lead to the overexpression of HLA-E, a minor antigen, on the CAR-T cell surface. The lack of endogenous HLA class I antigens and the presence of only HLA-E prevent the patient's T cells and NK cells from rapidly rejecting the allogeneic therapy. These cells are unlikely to persist indefinitely, and ultimately other types of immune cells in the patient will eliminate the allogeneic CAR-T cells. Our edits are designed to maintain the CAR-T cells in circulation longer in order to drive the persistence of the CAR-T cell product and to destroy a larger proportion of the targeted tumor cells**.**

Genome-Editing Landscape and Limitations

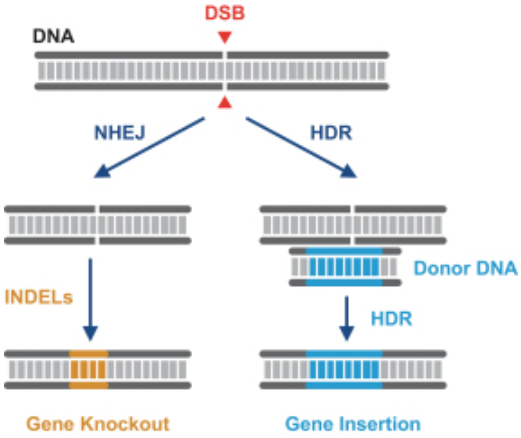

Figure 13. *Genome editing is initiated by generating a double-stranded break, or DSB, in chromosomal DNA at a desired location. The cell will seal the break by an error-prone process called non-homologous end joining, or NHEJ, leading to the formation of insertions and deletions, or indels, resulting in a site-specific gene knockout. If a donor DNA template is provided to the cell during genome editing that encodes a gene of interest, a process called homology-directed repair, or HDR, will result in the insertion of the donor DNA in a site-specific manner.*

Genome editing is a class of technologies that facilitate making specific changes to DNA sequences inside living cells. Genome editing occurs in two steps. In the first step, a double stranded break, or DSB, is made at the location of the genome where the edit is desired. A cell typically has two ways to repair the DSB, which result in the knockout of a gene or the insertion of new genetic material: non-homologous end joining, or NHEJ, and homology-directed repair, or HDR. NHEJ is an error-prone process in which the broken DNA ends are reattached. During NHEJ, the cell typically inserts or deletes a few nucleotides at the DSB. These insertions and deletions, or indels, destroy the coding sequence for the targeted gene, resulting in the knockout of the targeted sequence. HDR, by contrast, is a more controlled repair system where the cell incorporates donor DNA delivered during the experiment into the DSB, resulting in the site-specific insertion of the provided DNA sequence. See figure 13.

There are several well-established genome-editing technologies being applied to generate immune cell therapies currently in preclinical research or clinical development, including zinc-finger nucleases, or ZFNs, transcription activator-like effector nucleases, or TALENs, and meganucleases, but each has limitations with respect to both their agility and their ability to generate site-specific gene insertions with high efficiency. More recently, CRISPR genome-editing technology has been used for the generation of *ex vivo* immune cell therapeutics that are in preclinical research or clinical development.

The canonical CRISPR system utilizes Cas9, a protein that can cut genomic DNA. Cas9 is targeted to a site in a genome by a single- or dual-guide RNA. The guide RNA contains 20 nucleotides at the 5' end of the guide that are programmed to match the chromosomal DNA sequence selected for genome editing. One of the drawbacks of CRISPR-Cas9 genome editing is the occurrence of off-target editing. Off-target edits can alter an oncogene or tumor suppressor, impact the biology of the target cell, or have other negative consequences on therapeutic development. Additionally, the simultaneous occurrence of both on-target and off-target edits may lead to genomic rearrangements including chromosomal translocations that may be problematic for immune cell therapeutics, especially for ones that require multiple edits.

Our CRISPR Hybrid RNA-DNA Technology

Our chRDNA Guides

Our chRDNA technology uses the canonical *S. pyogenes* Cas9 protein or the *Acidaminococcus sp.* Cas12a protein and a guide that is composed of both RNA and DNA nucleotides termed **C**RISPR **h**ybrid **R**NA-**DNA**, or chRDNA, pronounced "chardonnay." chRDNA guides contain a mixture of RNA and DNA nucleotides in both the region that interacts with the chromosomal target DNA and in the region that does not interact with the target DNA. The presence of DNA in a chRDNA guide significantly improves editing specificity relative to an all-RNA guide. See figure 14. Like Cas9, Cas12a is a CRISPR protein used to edit genomic DNA site-specifically. See figure 15. We have developed the chRDNA guides to achieve the following advantages:

- Highly specific on-target genome editing;
- Equivalently high gene knockout efficiencies compared to conventional all-RNA guides;
- Cas12a chRDNA-mediated editing drives high efficiency gene insertions; and
- Multiplex editing with reduced risk of chromosomal translocations via our proprietary delivery technology.

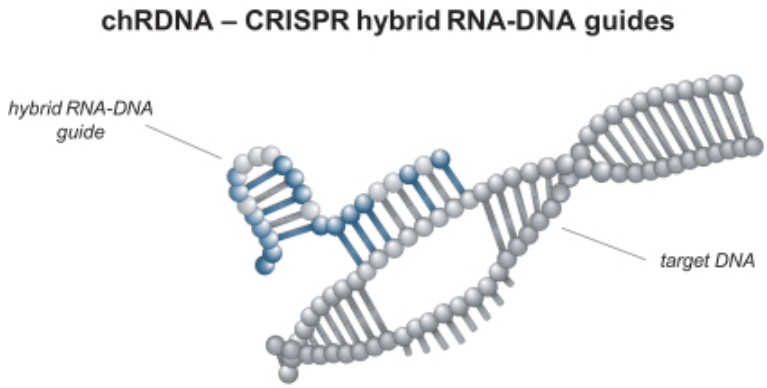

Figure 14. *Our chRDNA guides are hybrid molecules that contain both RNA and DNA nucleotides. They enable significantly improved specificity compared to first generation all-RNA guides.*

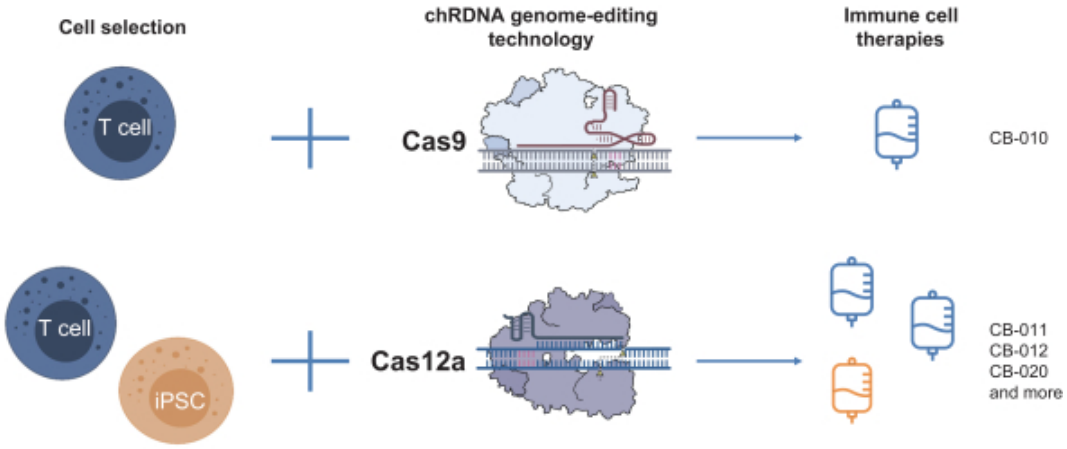

Figure 15. *We use Cas9 and Cas12a in the development of our allogeneic cell therapies.*

Our chRDNA Guides: Highly Specific On-Target Genome Editing

Our chRDNA guides mediate significantly more specific genome editing than all-RNA guides. We hypothesize that the presence of DNA in a chRDNA guide improves the specificity of genome editing by decreasing the affinity of a Cas9 chRDNA complex or a Cas12a chRDNA complex for target genomic DNA. A chRDNA guide retains sufficiently high affinity to edit a genome at the intended location. However, a chRDNA guide has sufficiently low affinity for potential off-target sites to reduce the likelihood of a genome edit at an unintended location. We evaluated the integrity and performance of chRDNA guides by employing two proprietary assays, the SITE-Seq assay and the VINE methodology, on two genes known from the scientific literature to suffer from high rates of off-target editing with either the Cas9 or Cas12a protein. As seen in figure 16 below, all-RNA guides generated both robust on-target and off-target editing. We developed chRDNA guides that target the exact same genomic locations that achieve equivalent on-target editing compared to the all-RNA guides. However, the chRDNA guides, in contrast to the all-RNA guides, result in little to no detectable off-target editing. For any single genome edit, the chRDNA platform provides high specificity for use in our product candidates. We have generated chRDNA guides for Cas9 and for Cas12a targeting multiple distinct locations in the human primary T cell genome that lead to high efficiency and high specificity editing, and an example is shown in figure 6 above.

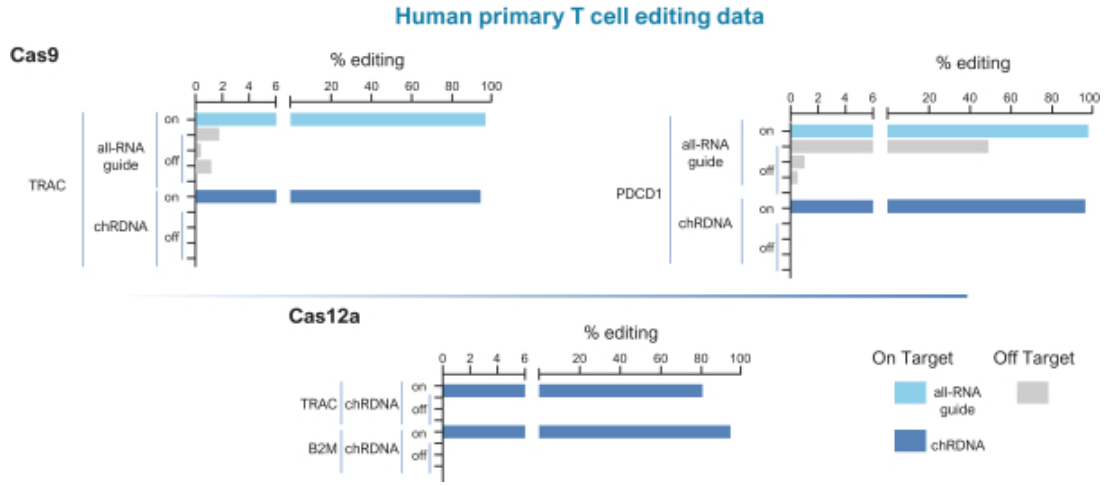

Figure 16. *Our chRDNA guides yield significantly increased editing specificity compared to all-RNA guides with either Cas9 or Cas12a.*

Our chRDNA Guides: Achieve Equivalent, High Gene Knockout Efficiencies Compared to Conventional all-RNA Guides

The inclusion of DNA in our chRDNA guides does not impair their activity, and they can achieve knockout efficiencies in human primary T cells with either the Cas9 or Cas12a protein that are equivalent to the knockout efficiencies achieved with all-RNA guides.

Our chRDNA Guides: Cas12a chRDNA-Mediated Editing Drives High Efficiency Gene Insertions

One of the challenges in the genome-editing field is obtaining a high degree of site-specific gene insertion. High efficiency gene knockout is achievable with a variety of genome-editing technologies, but achieving high efficiency gene insertion is more challenging. Either Cas9 or Cas12a can be used to insert a new gene into a genome. We use the combination of the Cas12a protein and our chRDNA guides to generate particularly high and reproducible gene insertion rates. Gene insertion requires delivery of the new gene into the target cells. To insert genes into T cells with our chRDNA technology, we transduce the cells with an engineered adeno-associated virus serotype 6, or AAV6, which contains the DNA template of interest to facilitate the integration of the DNA into the double-stranded break generated by the Cas9 chRDNA complex or the Cas12a chRDNA complex via the homology-directed repair pathway.

As shown in figure 17 below, approximately 60-75% gene insertion rates were achieved in human primary T cells edited with Cas12a chRDNAs, a significant rate that is competitive with other genome-editing platforms. We demonstrated the insertion of a B2M–HLA-E fusion gene, or Insert 1, into the *B2M* locus by staining the edited T cells for the expression of HLA-E following the knockout of all class I antigens via a *B2M* knockout and the insertion of the B2M–HLA-E fusion gene into the *B2M* locus. In the same T cells, we demonstrated the insertion of a BCMA-specific CAR transgene, or Insert 2, into the *TRAC* locus by staining the edited T cells for the expression of the CAR following the knockout of the T cell receptor, or TCR, via a *TRAC* knockout and the insertion of the CAR transgene into the *TRAC* locus. Cas12a chRDNA-mediated gene insertion rates are sufficiently high to enable multiplex insertions in the manufacture of some of our product candidates. For example, we implement two separate insertions in the manufacture of CB-011: an insertion of the BCMA-specific CAR transgene into the *TRAC* locus and an insertion of the B2M–HLA-E fusion gene into the *B2M* locus.

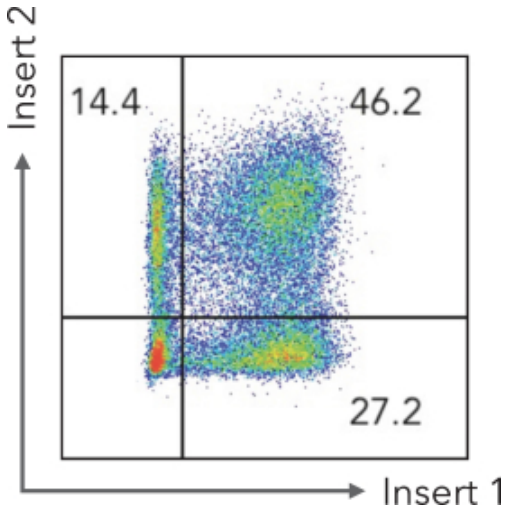

Figure 17. *Our Cas12a chRDNA technology mediates high rates of site-specific insertion. High efficiency Cas12a chRDNA editing yields ~46% of the modified T cells possessing 2 gene inserts and 2 gene knockouts, thus all 4 desired edits.*

Our chRDNA Guides: Capable of Multiplex Editing with Reduced Risk of Chromosomal Translocations via Our Proprietary Delivery Technology

By combining our chRDNA guides together with our proprietary delivery technology, we believe we are positioned to generate immune cell therapy product candidates with a higher degree of genomic integrity. High genomic integrity is crucial to ensuring that patients are not infused with immune cells harboring the potential for tumorigenicity or that have impaired function. The cell therapy product candidates we are developing include multiple genetic changes. For example, the CB-010 product candidate has edits at both the *TRAC* and *PDCD1* genes. In an effort to maintain the genomic integrity of our T cells after multiple editing events, we employ a proprietary delivery technology that relies on delivery parameters via electroporation for the introduction of Cas proteins and chRDNA guides into human primary T cells. Through this delivery technology, we minimize the generation of chromosomal translocations and genomic rearrangements that may result from multiple genome edits. Multiplex editing in T cells with different genome-editing technologies, such as TALENs or CRISPR-Cas9, using standard delivery technologies leads to 2-5% of the T cells containing chromosomal translocations or other genome rearrangements. As shown in figure 18 below, if we use the standard electroporation delivery technology commonly utilized for *ex vivo* cell therapy manufacturing, we observe >3% translocation rates when performing two genome edits. In contrast, when using our proprietary delivery technology, the translocation rate is reduced by more than an order of magnitude.

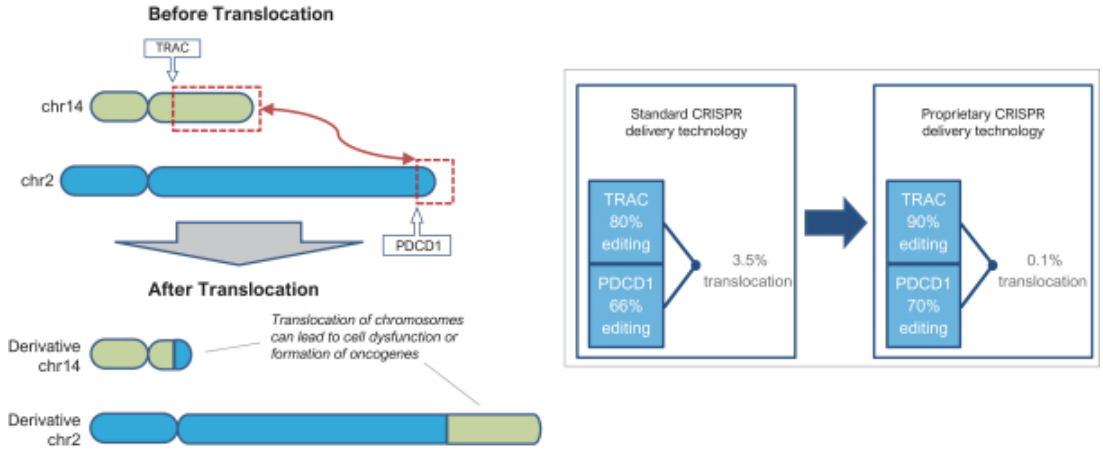

Figure 18*. Our proprietary delivery technology maintains the genomic integrity of our cellular therapies by significantly reducing the rates of chromosomal translocations.*

Portfolio Product Candidates: Design, Rationale, and Indications

CB-010

Overview: Strategy and Rationale

Our most developed product candidate is CB-010, a healthy donor-derived, genome-edited, allogeneic CAR-T cell therapy targeting CD19-positive malignancies, is being evaluated in the first-in-human, open-label, multicenter ANTLER phase 1 clinical trial (NCT04637763) in the United States in adults with relapsed or refractory B-NHL. CB-010 is designed to reduce the loss of antitumor activity and confer a better therapeutic index compared to other allogeneic CAR-T cells. To manufacture CB-010, we make three modifications to healthy donor-derived T cells using our Cas9 chRDNA genome-editing technology:

- *TRAC knockout*: We knock out the *TRAC* gene in order to eliminate expression of the T cell receptor, or TCR, from the surface of the CAR-T cells. The removal of TCR expression is intended to eliminate the risk of graft versus host disease, or GvHD, in patients.

- *Site-specific insertion of the anti-CD19 CAR:* We insert the CD19-targeted CAR into the *TRAC* gene by AAV6 transduction and homology directed repair. We believe site-specific insertion of the CAR has advantages compared to random integration mediated by lentiviral or retroviral insertion. For example, random integration leads to the risk of unintended gene disruption which is avoided via site-specific insertion. The insertion of the CAR yields a cell product that exhibits CD19-specific cytotoxicity.

- *PD-1 knockout:* We knock out PD-1, a checkpoint receptor, in order to improve the persistence of CAR-T cell antitumor activity in an "off-the-shelf" setting.

The PD-1/PD-L1 pathway leads to rapid exhaustion in T cells. This occurs when a T cell expressing PD-1 engages with another cell expressing PD-L1. B cell tumors and the patient's own cells can express PD-L1, leading to interaction with PD-1 and subsequent exhaustion of the CAR-T cells. We eliminate PD-1 expression from the CB-010 CAR-T cells, thereby preventing PD-1/PD-L1-mediated exhaustion. More than half of B-NHL tumors express PD-L1, and expression of PD-L1 in B-NHL correlates with poorer outcomes. We believe that knocking out PD-1 will maintain the CAR-T cells in a higher antitumor state for a longer period of time, and we

believe this will result in greater initial tumor debulking in the patient and thereby better long-term durability of the CAR-T cell antitumor activity. To our knowledge, CB-010 is the first allogeneic CAR-T therapy in the clinic with a PD-1 knockout. Other CAR-T cell therapies that express endogenous PD-1 could become rapidly exhausted and lose antitumor activity due to the interaction between PD-1 and PD-L1.

Figure 19 below graphically depicts CB-010 CAR-T cells lacking expression of PD-1 interacting with a CD19-expressing tumor cell that expresses PD-L1 on its surface. The lack of interaction between PD-L1 on a tumor cell and the CB-010 CAR-T cell eliminates the induction of the PD-1 checkpoint pathway in the T cells that would otherwise lead to their exhaustion.

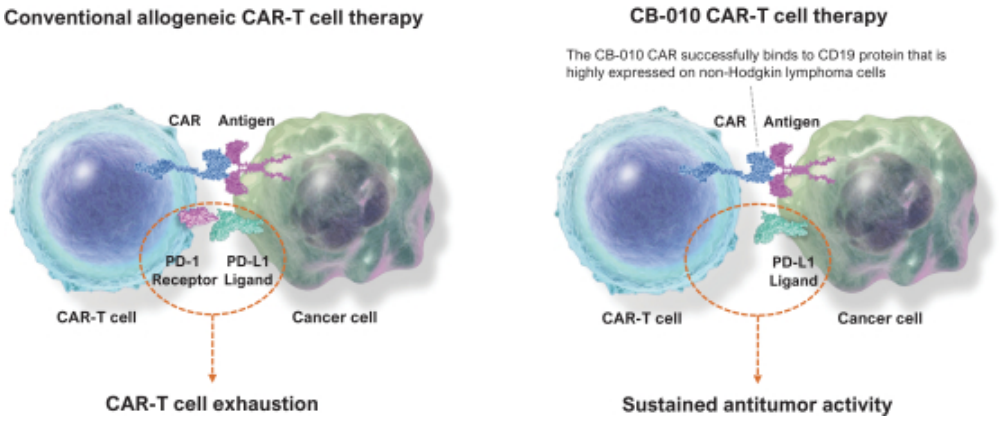

Figure 19. *Cancer cells use the PD-1/PD-L1 signaling pathway to evade immune cells and avoid destruction. The PD-L1 ligand on the tumor cell surface binds to the PD-1 receptor on the conventional allogeneic CAR-T cell, limiting the CAR-T cell's killing ability. CB-010 cells lack PD-1 on their surface and therefore are insensitive to PD-L1 expression. CB-010 cells are designed to maintain high antitumor activity for an extended duration.*

Target Indication

We are developing CB-010 for the treatment of relapsed or refractory B-NHL. Non-Hodgkin lymphoma is the most common hematologic malignancy with an estimated 81,560 cases or 4% of all cancers diagnosed in the United States in 2021, as reported by the American Cancer Society. B-NHL makes up 80 to 85% of those non-Hodgkin lymphoma cases.

B-NHL is a heterogeneous malignancy that is monoclonal in nature and arises in lymphocytes. The disease can often be traced to specific stages in lymphoid maturation. Most malignant lymphocytes derive from mature B cells or from lymphocytes of germinal center origin. The malignant cells have acquired the ability to proliferate, evade the host immune response, and avoid cellular apoptosis.

Overall, for aggressive relapsed or refractory B-NHL, newer immunologically-mediated therapies under investigation include checkpoint inhibitors and CAR-T cells. FDA approved autologous CD19-specific CAR-T cell therapies have shown significant complete response rates, progression-free survival, and overall survival. Despite the clinical benefits of these approved autologous CAR-T therapies, they are expensive and challenging to manufacture and many patients are ineligible, cannot wait the long vein-to-vein time, and may require bridging therapy. Thus, there remains significant unmet medical need in B-NHL.

Clinical Development Plan

CB-010 is undergoing evaluation in our first-in-human, open-label, multicenter ANTLER phase 1 clinical trial (NCT04637763) for the treatment of adult subjects with aggressive forms of relapsed or refractory B-NHL. The patient population will include individuals for whom at least two lines of chemo and/or immunotherapy have failed and who have not received CD19-targeted therapy previously. The patient population in the trial includes the following aggressive B-NHL subtypes: diffuse large B cell lymphoma, or DLBCL; high grade B cell lymphoma, or HGBL; transformed follicular lymphoma, or tFL; primary mediastinal large B cell lymphoma, or PMBCL; follicular lymphoma, or FL; marginal zone lymphoma, or MZL; and mantle cell lymphoma, or MCL. We have dosed the first patient in this clinical trial.

Patients in our ANTLER phase 1 clinical trial will receive a chemotherapy regimen prior to CAR-T cell infusion. The chemotherapy regimen includes two agents, cyclophosphamide and fludarabine, which are generally used for lymphodepletion prior to autologous CAR-T cell therapy. To ensure optimal engraftment of the allogeneic CB-010 cells, we will use a more intense regimen of these chemotherapeutic agents than has been previously used with CAR-T cell therapies. Our lymphodepletion regimen will provide better treatment flexibility so that the dosing may be modified to suit the patient's tolerance to the chemotherapy. We are adapting our lymphodepletion protocol from one previously described by investigators at the National Institutes of Health that they used in multiple clinical trials. The increased intensity refers to both the amount of each agent used and the timing of dosing. The primary objectives of the trial include the incidence of adverse events defined as dose-limiting toxicities after CB-010 infusion, the overall response rate, and the identification of the recommended phase 2 dose, or RP2D. See figure 20.

Our ANTLER phase 1 clinical trial is being conducted in two parts and we estimate enrolling up to approximately 50 patients across multiple centers in the United States. Part A is a dose escalation following a standard 3 + 3 design, with sequential, prespecified, increasing doses of CB-010. Part B is the expansion portion where patients will receive CB-010 at the dose determined in Part A. We expect to have initial data from this clinical trial in 2022.

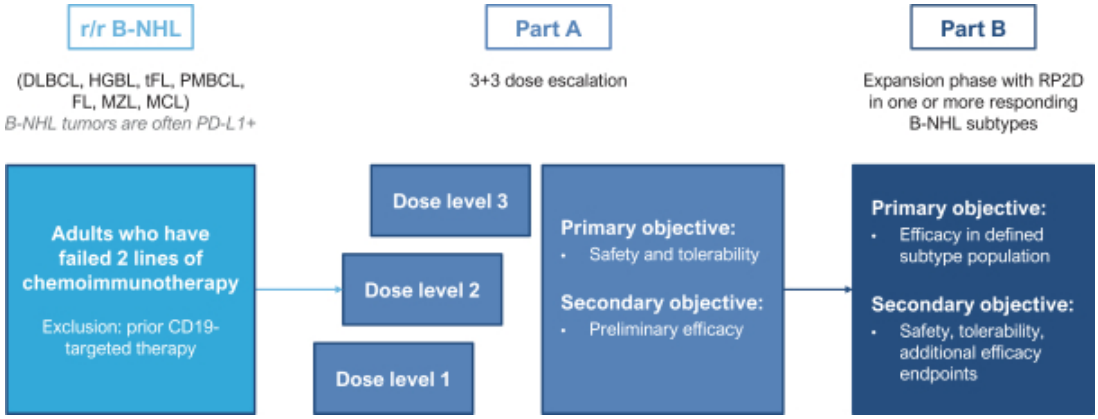

Figure 20. *Our ANTLER phase 1 clinical trial is designed to evaluate CB-010 in relapsed or refractory B-NHL lymphoma patients. It is an open-label phase 1 trial expected to enroll up to approximately 50 participants in total. The study will be conducted in two parts: Part A is a dose escalation with a 3 + 3 design, with sequential, prespecified, increasing doses. Part B is an expansion portion where patients will receive CB-010 at the recommended phase 2 dose, or RP2D, determined in Part A.*

Preclinical Data

In our preclinical studies, we demonstrated that the removal of the PD-1 checkpoint from the CB-010 CAR-T cells provided a statistically significant survival advantage in mice bearing robust and metastatic B cell tumors. In an effort to evaluate the impact of the PD-1 knockout on CB-010 CAR-T cell exhaustion and antitumor activity, we compared CB-010 CAR-T cells to conventional allogeneic CD19 CAR-T cells that express PD-1 in a long-term established tumor xenograft model. We engrafted immunodeficient mice in an orthotopic manner (by intravenous injection to ensure distribution within the bloodstream, lymphatics, and bone marrow) with the acute lymphocytic leukemia, or ALL, tumor model NALM-6 that expresses PD-L1. We allowed the tumors to engraft in the mice for 23 days to ensure that the tumors were metastatic to reflect the human condition with B-NHL. Once the tumors were well-established and metastatic, we treated the mice in three separate groups with the following different materials:

- Phosphate-buffered saline, or PBS, a negative control;
- Conventional allogeneic CD19 CAR-T cells, T cells with the anti-CD19 CAR used in CB-010 inserted into the *TRAC* locus, but without the PD-1 knockout; and
- CB-010.

As shown in figure 21 below, all of the mice had robust tumor burden after 23 days of tumor engraftment as shown by imaging (color bar indicates more tumor growth, from blue to red). On day 0, each cohort of animals received a single dose of either PBS, the conventional allogeneic CD19 CAR-T cells, or CB-010 cells. By day 14 following dosing (D14 post CAR-T), animals that received PBS had become more metastatic, whereas both CD19-specific CAR-T cell therapies had eradicated the established tumors. Following initial tumor clearance, the animals treated with the conventional allogeneic CD19 CAR-T cell therapy experienced a rapid recurrence of their tumor. For example, by day 108 following dosing, half the mice treated with the conventional allogeneic CD19 CAR-T cell therapy had expired from their recurrent tumor burden, and the surviving mice in that cohort had metastatic disease. In contrast, by day 108 following dosing, all of the CB-010-treated mice were alive and roughly half had no detectable tumor burden. As shown in the survival curve in figure 21 below, all of the mice treated with the conventional allogeneic CD19 CAR-T cells had succumbed to their tumors by approximately day 135, while all but one of the CB-010 treated mice were still alive by day 160.

Overall, our data demonstrate that the removal of the PD-1 checkpoint from the CB-010 CAR-T cells provided a statistically significant survival advantage in mice bearing robust and metastatic B cell tumors. Our data suggest that the PD-1 knockout may have led to a more robust debulking of the tumor by CB-010 during the early part of the study compared to the conventional allogeneic CD19 CAR-T cells, leading to a reduction in the recurrence of the tumor cells. Based on these data, we believe CB-010 has the potential for a better therapeutic index compared to other allogeneic CAR-T cells. If a lower dose of CB-010 has meaningful activity in the clinical setting, it would lead to several potential advantages including limited toxicity, increased numbers of doses per manufacturing run, and a reduced cost of goods.

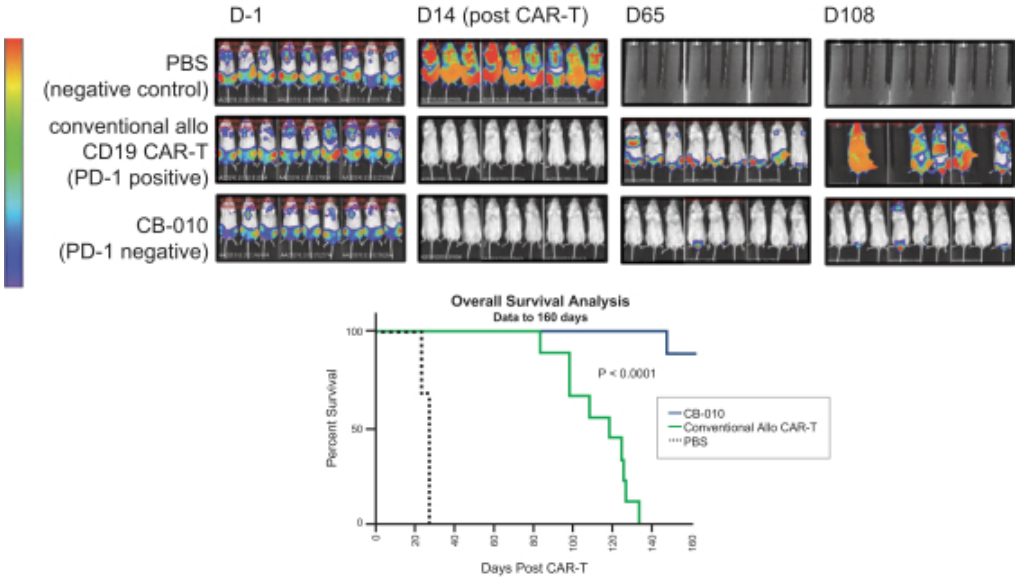

Figure 21. *Our preclinical mouse xenograft model demonstrates that CB-010 leads to a significant survival advantage over a conventional allogeneic CAR-T lacking a PD-1 knockout.*

In addition, as shown in figure 22 below, a single-dose CB-010 treatment led to robust, reproducible, and statistically significant survival in mice bearing DLBCL tumor cells, MCL tumor cells, or a patient-derived xenograft, or PDX, model of DLBCL.

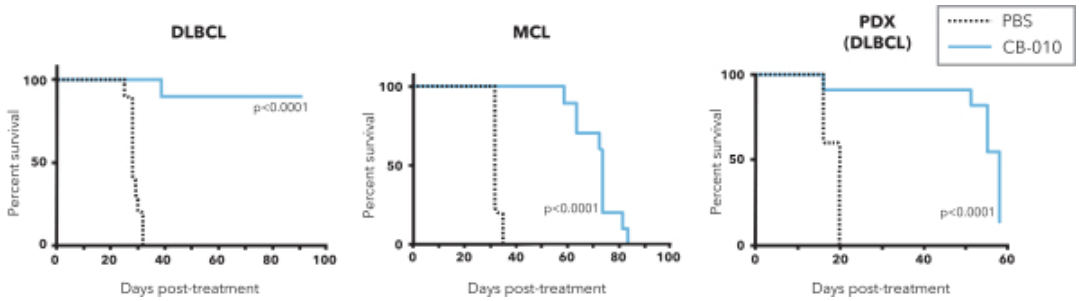

Figure 22. *CB-010 demonstrates statistically significant preclinical survival benefit across B-NHL indications.*

Together, our data support the efficacy of CB-010 in the treatment of CD19-positive B cell malignancies in mice.

In addition, we determined in our *in vitro* studies that the knockout of PD-1 does not impair CAR-T cell activity. We characterized the antitumor activity of CB-010 CAR-T cells *in vitro* by co-incubating CB-010 cells with tumor cells of B cell origin. For example, CB-010 cytotoxic activity was tested *in vitro* against a CD19-positive model cell line of DLBCL (Toledo cells). As shown in figure 23 below, CB-010 cells demonstrate dose-dependent and robust cytotoxic activity at a range of effector-to-target ratios compared to negative control cells in which the *TRAC* gene was knocked out but no CAR was inserted, called *TRAC* KO, or compared to cells

without any genome editing, called wild-type, or WT. We additionally compared the cytotoxic activity of CAR-T cells where we inserted the CAR into the *TRAC* locus, but did not knock out PD-1, called conventional allogeneic CD19 CAR-T cells. CB-010 and conventional allogeneic CD19 CAR-T cells exhibit equivalent cytotoxic activity demonstrating that the PD-1 knockout does not impair cytotoxic activity.

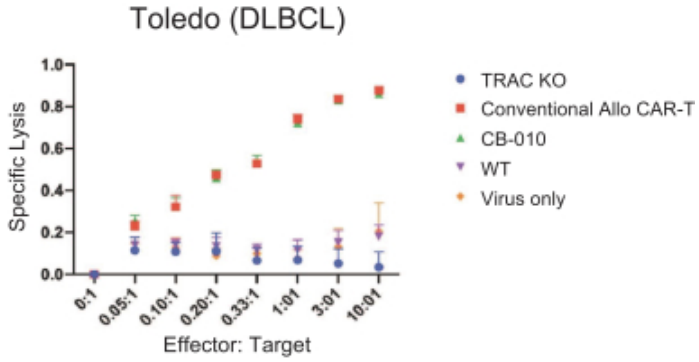

Figure 23. *Our in vitro studies demonstrate that the PD-1 knockout does not impair CAR-T cell activity.*

We evaluated the preclinical safety of CB-010 in mice and determined that CB-010 does not lead to GvHD in our mouse models. For comparison, we evaluated mice that received normal human T cells that were not genome edited and therefore express the T cell receptor, or TCR. In our study, we observed that the normal, unedited human T cells caused GvHD in the mice, as we expected, because the T cells could recognize the mouse tissues as foreign. GvHD was measured as changes in body weight and other clinical signs. Importantly, we observed that CB-010 did not induce any signs of GvHD. These observations were part of the data package that we provided to the FDA for our IND.

CB-011

Overview: Strategy and Rationale

CB-011 is an allogeneic CAR-T cell therapy targeting BCMA-positive malignancies. The CB-011 cells express our proprietary, potent, humanized anti-BCMA CAR that exhibits better performance in preclinical *in vivo* antitumor activity compared to other BCMA CARs we evaluated. We acquired a novel humanized scFv directed to BCMA that we use for the generation of the BCMA-specific CAR in CB-011.

We believe that the edits we make to immune cloak the product will maintain the CB-011 cells in the patient's circulation longer. CB-011 is a preclinical product candidate and we make a total of four genome edits using the Cas12a chRDNA technology to manufacture CB-011.

- *TRAC knockout*: We knock out the *TRAC* gene in order to eliminate expression of the T cell receptor, or TCR, from the surface of the CAR-T cells. The removal of TCR expression is intended to prevent graft versus host disease, or GvHD, in patients.

- *Site-specific insertion of the anti-BCMA CAR*: We insert the BCMA-targeted CAR into the *TRAC* gene by AAV6 transduction and homology directed repair. We believe site-specific insertion of the CAR has advantages compared to random integration mediated by lentiviral or retroviral insertion. For example, random integration leads to the risk of unintended gene disruption which is avoided via site-specific insertion. The insertion of the CAR yields a cell product that exhibits BCMA-specific cytotoxicity.

- *B2M knockout:* We knock out B2M, a protein necessary for the presentation of HLA class I molecules on the surface of a T cell. The disruption of the *B2M* locus yields a cell product that does not express endogenous HLA class I molecules, limiting the ability of the patient's T cells to detect and reject the CAR-T cell therapy.

- *Site-specific insertion of a B2M–HLA-E fusion protein:* We site-specifically insert a transgene that fuses B2M, HLA-E, and a peptide by AAV6 transduction and homology directed repair. HLA-E is a minor class I antigen that interacts with NK cells. This insertion, combined with the *B2M* knockout, yields a cell product that has only HLA-E, and no other class I antigens, on its surface. The presence of only HLA-E will prevent both the patient's T cells and NK cells from rapidly rejecting the therapy.

In figure 24 below, we outline the impact of the different edits in the CB-011 product candidate to demonstrate how different leukocyte immune cells of the patient will interact with the CAR-T cells.

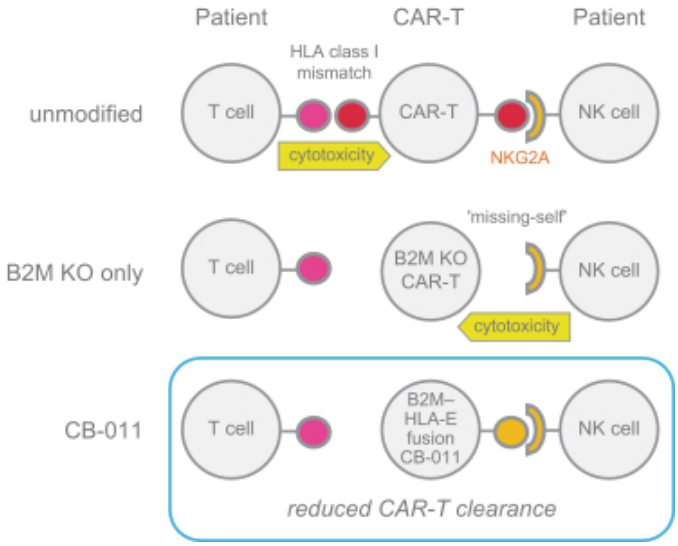

Figure 24. *Our CB-011 cloaking strategy blunts immune-mediated rejection by patient T and NK cells.*

In this example, we show that unmodified CAR-T cells, those that have intact HLA class I antigens, are subject to rejection by the patient's cytotoxic T cells once the T cells recognize the allogeneic CAR-T cells as foreign. This is mediated by the presentation of peptides by the CAR-T cells via their HLA class I antigens to the patient's immune system that will recognize them as foreign since the CAR-T cells are derived from a non-familial healthy donor. If we only knock out the *B2M* gene, thereby eliminating all HLA class I antigens, the cytotoxic T cells of the patient would no longer recognize the CAR-T cells as foreign. However, the NK, cells of the patient would detect the lack of HLA class I antigens, a concept known as "missing self," which would unleash the activity of the NK cells, enabling them to destroy the allogeneic CAR-T cells. In CB-011, we protect the CB-011 CAR-T cells from rejection by both the patient's cytotoxic T cells and NK cells by removing endogenous HLA class I antigen presentation through the knockout of *B2M* and by inserting a B2M–HLA-E fusion into the *B2M* locus.

We believe that this strategy will enable the CB-011 CAR-T cells to remain in circulation longer in patients, providing for increased potential of antitumor activity.

Target Indication

The BCMA CAR targets the CAR-T cell therapy to B cells expressing BCMA on their surface. CB-011 is a product candidate for the treatment of relapsed or refractory MM. In 2020, 18% of hematologic malignancies in the United States and 1.8% of all cancers were MM. The median age of diagnosis is 69 years, and there are an estimated 32,270 new cases in the United States with an estimated 12,830 deaths each year. Five-year survival in these patients is approximately 47%.

Preclinical Data

To demonstrate that the B2M–HLA-E fusion protects CB-011 from NK-mediated cell killing, we set up an *in vitro* study where NK cells were incubated with CAR-T cells containing the attributes of the three examples described in figure 24 above. The results of this analysis are shown in figure 25 below. The unmodified CAR-T cells were subject to killing, or lysis, by the NK cells. The knockout of *B2M* led to enhanced killing by the NK cells, demonstrating the "missing self" hypothesis. Insertion of the B2M–HLA-E fusion in the CB-011 cells protected them from NK cells more than the unmodified cells, indicating they could resist killing by NK cells, thereby suggesting longer circulation potential in patients.

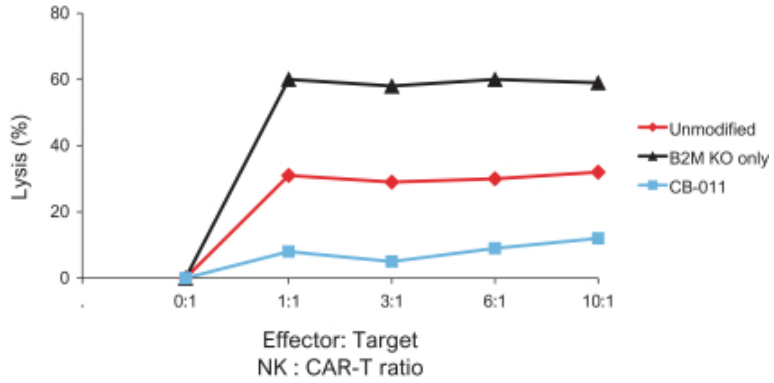

Figure 25. *Our in vitro data demonstrate that the B2M–HLA-E fusion protects CB-011 CAR-T cells from NK cell-mediated lysis. We measured in vitro cytotoxicity 24 hours after CAR-T cell co-incubation with NK-92 cells.*

We acquired a novel humanized scFv directed to BCMA that we use for the generation of the CB-011 CAR based on preclinical *in vivo* antitumor activity that exhibited better performance compared to other BCMA-specific scFvs we evaluated. For example, we constructed CARs using this and other scFvs, and we evaluated the antitumor potential of CAR-T cells expressing these different CARs in mice bearing BCMA-positive tumors. In figure 26 below, we show an example of mouse xenograft data comparing CB-011 cells with CAR-T cells expressing an alternative BCMA CAR previously described in the literature and evaluated in multiple clinical trials. CB-011 cells led to statistically significant and longer survival of the tumor-bearing mice. The studies were conducted in two different BCMA-positive tumor models, including MM (left panel).

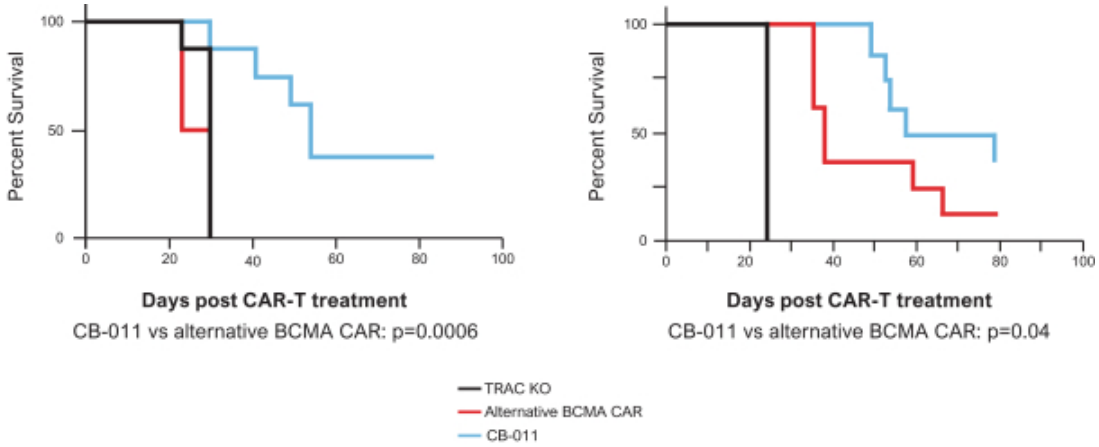

Figure 26. *CB-011 led to statistically significant and longer survival of tumor-bearing mice relative to alternative anti-BCMA CAR-T cells. Left panel represents established subcutaneous multiple myeloma tumor xenografts after a single dose CAR-T cell treatment. Right panel represents established orthotopic BCMA+ tumor xenografts after a single dose CAR-T cell treatment. TRAC KO cells, a negative control, are T cells with only a knockout of the TRAC gene and no CAR.*

Clinical Development Plan

We expect to file an IND in 2022 for a phase 1 clinical trial evaluating CB-011 in patients with relapsed or refractory MM. We anticipate evaluating CB-011 in patients with a documented diagnosis of active MM according to International Myeloma Working Group diagnostic criteria who have experienced at least two prior lines of therapy with previous exposure to a first-line triplet therapy including a proteasome inhibitor, an immunomodulatory agent, and an anti-CD38 antibody (unless intolerant to these therapies) and are refractory to the last line of therapy.

CB-012

Overview: Strategy and Rationale

CB-012 is our allogeneic CAR-T cell product candidate that targets the antigen CD371, also known as CLL-1 or CLEC12A, a receptor expressed on AML tumor cells. Our goal is to make multiple edits to this product candidate using our Cas12a chRDNA technology. We believe CD371 is a compelling target for the treatment of AML. An important aspect of the CD371 antigen is its expression on >90% of AML tumors and leukemic stem cells, and its lack of expression on hematopoietic stem cells, or HSCs. The absence of expression on HSCs indicates that these bone marrow cells will not be targeted by the CD371-directed CB-012 CAR-T cells, thereby preventing a patient from loss of a critical compartment of their immune system vital for fighting infections and cancer. As such, patients receiving CB-012 treatment would not require an HSC transplant to provide them with myeloid compartment cells for sustained immunity.

We have in-licensed from MSKCC a panel of fully human scFvs targeting CD371 from which we will select the appropriate scFv(s) for the generation of our CAR. As described above for CB-010 and CB-011, an important aspect of CB-012 will be appropriately armoring the CAR-T cells using our Cas12a chRDNA technology to improve the persistence of antitumor activity. We are evaluating several options including the PD-1 knockout and immune-cloaking approaches. We are considering additional armoring technologies which may include editing that will help the CAR-T cells survive longer, withstand functional suppression by the tumor cells, and enhance their antitumor activity.

Target Indication

AML is a cancer of the bone marrow currently treated with chemotherapy, radiation, targeted therapies, and/or HSC transplant. In 2020, there were 20,000 new cases of AML in the US, with >40,000 new patients in the seven major global markets. Five-year survival in these patients is <30%, so significant unmet need remains for this indication.

Intensive induction chemotherapy, known as 7 + 3, consisting of cytarabine and an anthracycline is the most effective therapy for adults newly diagnosed with AML, although the treatment has significant associated toxicities. Thus, there remains significant unmet need in the treatment of AML.

Preclinical Data

Researchers at MSKCC evaluated one of the CD371-specific scFvs that we in-licensed in a CAR that they expressed on T cells. The CD371-specific CAR-T cells were tested in an established mouse xenograft model of AML. For comparison, they evaluated two negative control CAR-T cells, one that could not bind to the AML tumor cells, and one specific for CD19, a protein not expressed on AML cells. As shown in figure 27 below, the CD371-specific CAR-T cells significantly extended survival in the AML tumor-bearing mice compared to mice that received either of the two negative control CAR-T cell treatments.

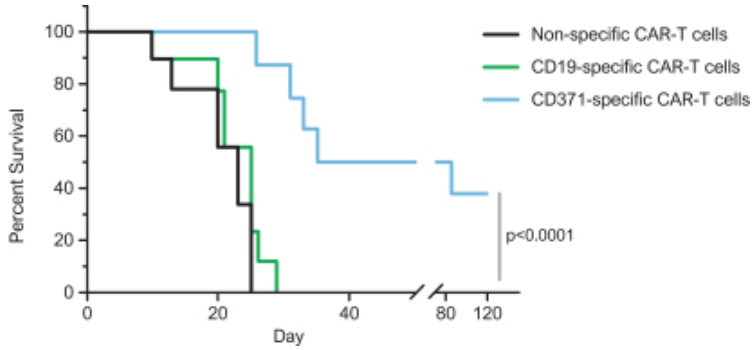

Figure 27. *Researchers at MSKCC conducted a study evaluating CD371-specific CAR-T cells. Their work demonstrated that CD371-specific CAR-T cells confer long-term survival in a xenograft model of AML (data used with permission from MSKCC).*

Clinical Development Plan

Our strategy is to file an IND for CB-012 in 2023 with the intent to evaluate this therapy in patients with relapsed or refractory AML in a phase 1 clinical trial.

CB-020

Overview: Strategy and Rationale

Our CB-020 program is a CAR-NK cell product candidate derived from iPSCs designed to target an antigen expressed on solid tumors and associated metastases. Despite their clinical success against hematologic malignancies, CAR-T cells have not yet demonstrated broad, robust antitumor activity in the solid tumor setting. NK cells are a compelling platform for cell therapy development for targeting multiple different solid tumors. NK cells inherently have antitumor activity against primary solid tumors and metastases and they are naturally transferable between donor and patient. We believe they are a promising cell type for new therapeutic

development. In order to perform multiple, sophisticated genome edits to empower NK cells with the attributes we believe will be necessary to successfully target the intended solid tumor and overcome the immunosuppressive tumor microenvironment, we have developed a proprietary protocol to edit iPSCs and differentiate them into iNKs. See figure 28 below.

There are multiple advantages of using iPSCs. They are amenable to higher numbers of genome-editing events than most primary cells. A solitary clone isolated after genome editing will have all of the intended edits. This is distinct from the allogeneic CAR-T cell products derived from healthy donor leukapheresis where a proportion of the T cells in a batch contain all of the intended edits. This fully edited iPSC will then be differentiated into iNK cells and expanded for therapeutic use. This platform will enable us to generate sophisticated, armored iNK cell product candidates with attributes necessary for targeting solid tumors.

An outline of the multi-step iPSC to iNK platform we developed to generate CB-020, and future product candidates, is shown in figure 28 below.

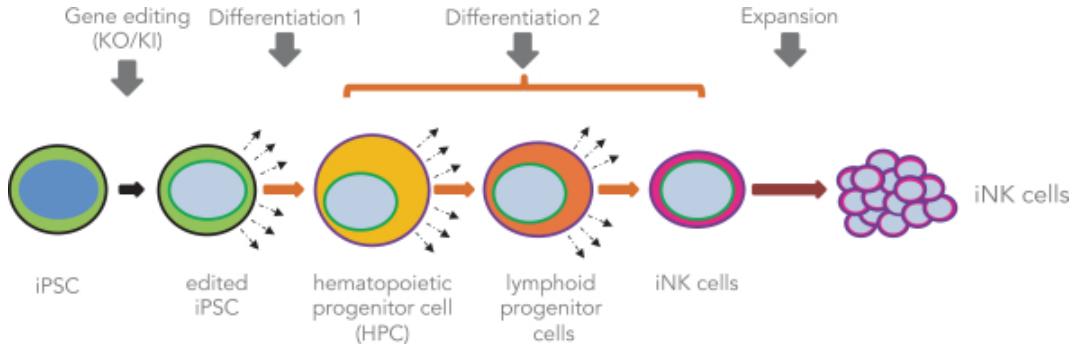

Figure 28. *Our platform for editing iPSCs and differentiating them into iNKs.*

Target Indication

Multiple clinical trials are evaluating autologous CAR-T and CAR-NK cell therapies targeting solid tumors. Although some activity has been observed clinically, the overall response rates with these therapeutic modalities have been significantly lower and fewer complete responses have been observed compared to those observed when treating hematologic malignancies. Some of the challenges facing these therapies may be that the CAR-T and CAR-NK cells have difficulty in trafficking to the tumor, surviving and proliferating at the tumor site, penetrating the tumor, surviving the immunosuppressive tumor microenvironment, and debulking a heterogeneous tumor that may not uniformly express the target of the CAR-T or CAR-NK cell.

For CB-020, we will implement multiple genome edits that we believe will address the challenges described above including solid tumor heterogeneity, immunosuppression, trafficking, and tumor penetration, as well as other strategies to maintain persistence such as those described for our CAR-T product candidates. A clonal iPSC line will be isolated, evaluated for genomic integrity, differentiated into iNK cells, expanded in culture using our established process, and evaluated in preclinical models of safety and efficacy prior to IND filing. We are evaluating multiple targets and strategies for the development of this product series.

Preclinical Data

In figure 29 below, we demonstrate that iNK cells differentiated from iPSCs express a key defining antigen called CD56, or NCAM, that is indicative of the NK cell lineage. Additionally, we show that the iNK cells exhibit the expected polyfunctionality of NK cells. For example, we show that the iNK cells exhibit dose-dependent cytotoxic activity and interferon gamma, or IFNg, secretion when co-incubated with tumor cells *in*

vitro. Further, when the iNK cells are co-incubated *in vitro* with CD20 positive tumor cells and rituximab, an anti-CD20 antibody, we observe antibody-dependent cell cytotoxicity, or ADCC.

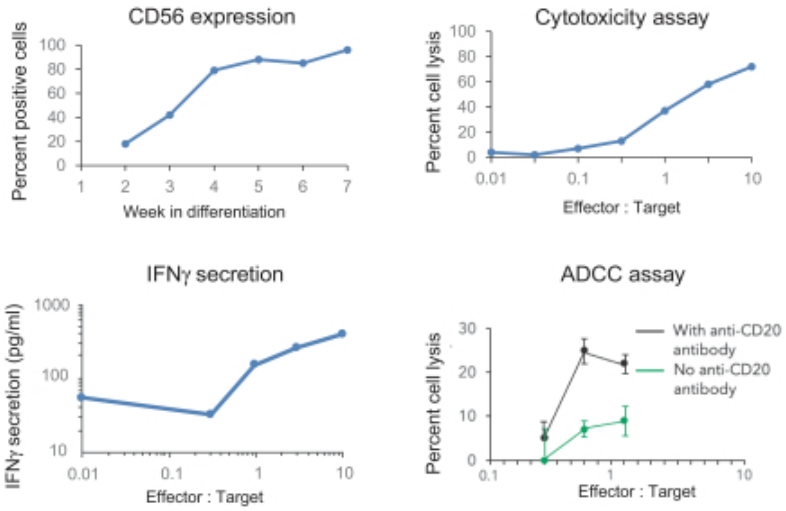

Figure 29. *iNK cells differentiated from iPSCs using our differentiation protocol demonstrate the expected polyfunctionality of NK cells.*

Our iNK platform provides the potential for multiple future cell therapeutics beyond CB-020, targeting different solid tumor antigens and types. The biology of the tumor will help define the nature of the genome edits we implement to customize each product to address the challenges of one or more particular malignancies.

Clinical Development Plan

Our strategy is to file an IND for CB-020 with the intent to advance it clinically to treat multiple solid tumor types.

Our Manufacturing Strategy

Manufacturing of both autologous and allogeneic cell therapies requires multiple components and is complex, and there are many similarities in the processes for both kinds of therapies. The advantage of allogeneic therapies is the use of cells from healthy donors and therefore the ability to prepare, qualify, and release clinical material in advance of patient need.

For CB-010, we have optimized the manufacturing process that we developed in-house and have transferred the manufacturing to an external CMO that manufactures cGMP grade material for our ANTLER phase 1 clinical trial. Additionally, we have developed different analytical methods to understand the integrity of our cells based upon our manufacturing process. We have made a significant investment in process development to facilitate our efforts to improve both the supply chain and our product characterization capabilities.

Figure 30 below describes the process we have developed for the manufacturing of CB-010 CAR-T cells. We use electroporation for the genome-editing step in our process. We use a licensed MaxCyte instrument to achieve high levels of genome editing at manufacturing scale. Our process includes an important step prior to cryopreservation that significantly removes residual TCR-expressing cells to reduce the likelihood that CB-010 cells will induce GvHD in patients.

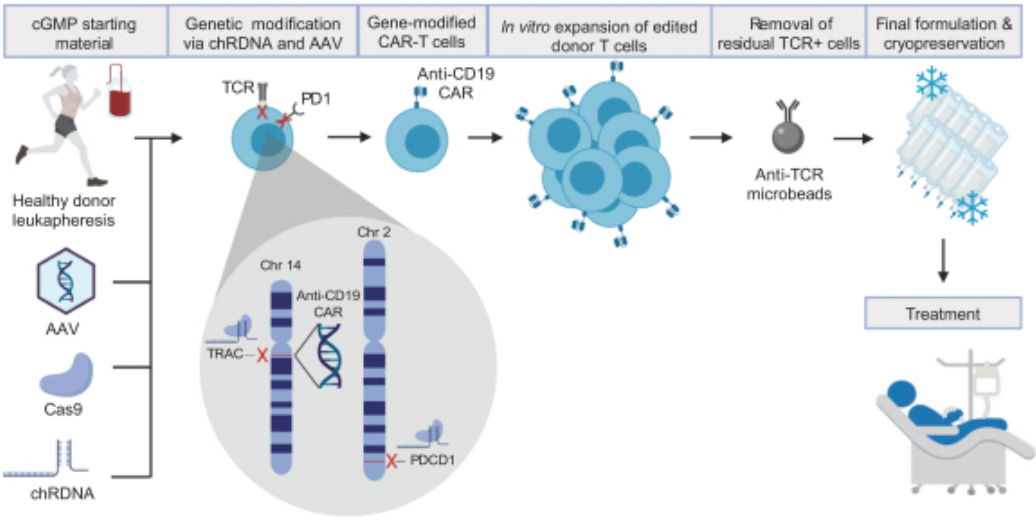

Figure 30. *Our internal process development team developed the manufacturing process for CB-010 and transferred it to a CMO.*

Our process development and manufacturing core competencies and advantages include:

- Standard operating procedures and technologies;
- Process development research from smaller to larger scales;
- Procedures that enable the transfer from process development stage to cGMP conditions;
- Custom engineering to create a robust procedure for each unique pipeline product candidate;
- Removal of residual TCR positive T cells after genome editing to minimize the risk of GvHD in patients;
- Evaluation of all manufacturing steps to optimize for maximal productivity and product integrity;
- Fully closed system;
- Focus on efforts to enhance cell viability;
- Enhancement of gene knockout, CAR expression, and gene insertion;
- Improvements in retaining early memory T cell phenotypes; and
- Approaches to maximizing the number of doses per batch.

The CMO that is manufacturing the phase 1 clinical supply of our CB-010 product candidate is located in the United States and is subject to cGMP requirements, using both qualified equipment and materials. We use multiple CMOs to individually manufacture cGMP plasmids, chRDNA guides, Cas proteins, and AAV6 vectors used in the manufacture of our CAR-T and CAR-NK cells. We expect to rely on our CMOs for the manufacturing of our product candidates in the future to expedite readiness for future clinical trials and most of these CMOs have demonstrated capability in preparation of materials for commercialization. Additionally, we may decide to build our own manufacturing facility in the future to provide us greater flexibility and control over our clinical or commercial manufacturing needs.

Strategic Agreements

We recognize the broad opportunity presented by our genome-editing technologies to benefit patients, and we appreciate that one company is unlikely to have sufficient resources to fully exploit this potential across multiple indications and applications. As part of our strategy to maximize the value and benefit of our technologies, we have entered into a strategic collaboration with AbbVie and intend to explore mutually beneficial strategic collaborations with other biotechnology or pharmaceutical companies in the future.

AbbVie Manufacturing Management Unlimited Company (AbbVie)

On February 9, 2021, we entered into a Collaboration and License Agreement with AbbVie, or the AbbVie Agreement. The collaboration is based on the selection and use of targets under programs, each referred to as a Program Slot (which may include one target or, for a dual CAR-T product, two targets), to develop collaboration CAR-T products (and corresponding licensed products). For each of AbbVie's two Program Slots (or up to four Program Slots, if AbbVie elects to expand the number as discussed below), we will collaborate to identify and develop one or more collaboration allogeneic CAR-T products directed toward the single cancer target or target combination chosen by AbbVie and as described in an applicable research plan, utilizing our Cas12a chRDNA genome-editing and cell therapy technologies. We granted AbbVie an exclusive (even as to us), royalty-bearing, worldwide license, with the right to grant sublicenses, under our Cas12a chRDNA and cell therapy intellectual property (as well as certain genome-editing technology that we may acquire in the future) and intellectual property that may be developed under the collaboration, solely for AbbVie to develop, commercialize, manufacture, and otherwise exploit the collaboration CAR-T products in the field of human diagnostics, prophylactics and therapeutics. Under the terms of the AbbVie Agreement, we will conduct certain preclinical research, development, and manufacturing activities under the collaboration, including certain activities for the manufacture of supply of licensed product for AbbVie's phase 1 clinical studies, and AbbVie will reimburse us for all such activities. The duration of the collaboration is not fixed. We have formed a joint governance committee, or JGC, to manage the collaboration.

We received an upfront cash payment of $30.0 million from AbbVie. During the collaboration, AbbVie may expand from two Program Slots to a total of four Program Slots by paying us an additional $15.0 million for each such Program Slot, provided that AbbVie must make such payment within the earlier of (a) 60 calendar days following completion of the phase 1 clinical studies for the initial collaboration CAR-T and (b) December 31, 2025. Under the terms of the AbbVie Agreement, we are eligible to receive up to $150.0 million in future developmental, regulatory, and launch milestones for each Program Slot and up to $200.0 million in commercial milestones for each Program Slot. We are also eligible to receive global tiered royalties on incremental net sales of licensed products sold by AbbVie, its affiliates, and sublicensees in the high-single-digit to low-teens percent range, subject, in certain instances, to various reductions.

Under the terms of the AbbVie Agreement, AbbVie has selected its initial targets and has reserved six additional targets, which may be used or substituted into the two Program Slots or used for the third or fourth Program Slots if AbbVie expands the number of Program Slots during the collaboration. We have, with AbbVie, identified and agreed to an initial list of four unavailable targets.

Additionally, with the exception of AbbVie's reserved targets and our unavailable targets (assuming we are meeting the criteria set forth above), in the event that AbbVie wishes to propose a target, there is a gatekeeper mechanism whereby such target will not be available to AbbVie.

The term of the AbbVie Agreement will continue in force and effect until the date of expiration of the last royalty term of the last country in which a licensed product is exploited. On a licensed product-by-licensed product and country-by-country basis, the royalty term is the period of time beginning on the first commercial sale of a licensed product in a country and ending on the latest of (a) the expiration, invalidation, revocation, cancellation, or abandonment date of the last Caribou patent that includes a valid claim that claims (i) the collaboration CAR-T product in such licensed product, or (ii) the method of making the collaboration CAR-T product in such licensed product (in the case of (ii), only for so long as no biosimilar product is commercially available in such country), in such country; (b) 10 years from the first commercial sale of such licensed product in such country; and (c) expiration of regulatory exclusivity for such licensed product in such country. The AbbVie Agreement may be terminated during the term by either party for an uncured material breach or bankruptcy. Additionally, AbbVie may terminate the AbbVie Agreement, in its entirety or on a licensed product-by-licensed product basis, effective immediately upon written notice to us, if AbbVie in good faith believes that it is not advisable for AbbVie to continue to exploit the collaboration on CAR-T products or licensed products as a result of a perceived serious safety issue. AbbVie may also terminate the AbbVie Agreement in its entirety, or, for any or no reason, upon 90 calendar days' prior written notice to us.

AbbVie does not have any rights to CB-010, CB-011, CB-012, or CB-020.

Memorial Sloan Kettering Cancer Center (MSKCC)

On November 13, 2020, we entered into an Exclusive License Agreement with MSKCC, or the MSKCC Agreement, under which we exclusively licensed from MSKCC know-how, biological materials, and related patent families to humanized scFvs targeting CD371 for use in T cells, NK cells, and iPSC-derived cells for allogeneic CD371-targeted cell therapy, which is our CB-012 program. We paid an upfront payment of cash and shares of our common stock and will owe annual license maintenance fees until we have commercial sales. For each licensed product, there are potential clinical, regulatory, and commercial milestones totaling up to $112.0 million and, in the event we, or our affiliates or sublicensees, receive regulatory approval for CB-012, we will owe low- to mid-single-digit percent tiered royalties on net sales by us, our affiliates, and our sublicensees. Our license includes the right to sublicense through multiple tiers and we will owe MSKCC a percentage of upfront cash or equity received from our sublicensees. The percentage owed decreases as our products move through development, starting at a low-double-digit percentage if clinical trials have not yet begun and decreasing to a mid-single-digit percentage if the product is in later clinical trial stages. We are also responsible for a percentage of licensed patent costs. The MSKCC Agreement includes certain diligence milestones that we must meet; provided, however, that these may be extended upon payment of additional fees.

MSKCC is entitled to certain success payments in the event that our stock value increases by certain multiples. The potential payments are based on multiples of the fair market value of our common stock compared with an initial share price of $9.4379 per share, subject to adjustments for stock splits, during a specified time period described below. Our common stock price will be determined by reference to the 45-day volume weight average trading price of our common stock. At our option, payments may be made in cash or common stock. The relevant time period commences when the first patient is dosed with our CB-012 product in the first phase 1 clinical trial and ends upon the earlier of the third anniversary of approval of our biologics license application, or BLA, by the FDA or 10 years from the date the first patient was dosed with CB-012 in the first phase 1 clinical trial. Under the terms of the MSKCC Agreement, the aggregate success payments will not exceed $35.0 million. Additionally, if we undergo a change of control during the relevant time period, a change of control payment may be owed, depending upon the increase in our stock price due to the change of control and also to what extent success payments have already been paid. In no event will the combination of success payments and any change of control payment exceed $35.0 million. The relevant time period during which MSKCC is eligible for success

payments and a change of control payment has not yet commenced; thus, this offering will not trigger any such payments.

We may terminate the MSKCC Agreement upon 90 calendar days' prior written notice to MSKCC. MSKCC may terminate the agreement in the event of our uncured material breach, bankruptcy, or criminal activity. In the event that MSKCC materially breaches the MSKCC Agreement in certain circumstances (for example, granting a third party a license in our field), then during the time of such uncured material breach, MSKCC will not be entitled to receive any success payments or any change of control payment.

ProMab Biotechnologies, Inc. (ProMab)

On January 31, 2020, we entered into a Sale and Assignment Agreement with ProMab, or the ProMab Agreement, as amended, under which we purchased a humanized scFv targeting the BCMA, and a patent family related thereto for an upfront cash payment of $0.4 million and the potential for future royalties. To date, two U.S. patents have granted (U.S. Patent Nos. 10,927,182; 11,021,542), both of which will expire in January 2040 (assuming no patent term extension). Our anti-BCMA CB-011 product candidate, which is currently in preclinical studies, contains this BCMA scFv. Under the terms of the ProMab Agreement, in the event we, or our affiliates or licensees, receive regulatory approval for CB-011, we will owe ProMab low-single-digit percent tiered royalties on net sales by us, our affiliates, and licensees until the expiration, abandonment, or invalidation of the last patent within the assigned patent family (*i.e.*, 2040, without patent term adjustment or patent term extension). Such royalties may be reduced by no more than 50% in the event that we must pay royalties to a third party for other intellectual property covering our product. Either party may terminate the ProMab Agreement in the event of an uncured material breach or bankruptcy of the other party. In the event that ProMab terminates the ProMab Agreement due to our uncured material breach or bankruptcy, we must cease the manufacture, use, and sale of any products or product candidates incorporating the purchased anti-BCMA scFv.

Pioneer Hi-Bred International, Inc. (Pioneer, now Corteva Agriscience)

On July 13, 2015, we entered into an Amended and Restated Collaboration and License Agreement with Pioneer (then a DuPont company), or the Pioneer Agreement, as amended, which superseded and replaced a prior Collaboration and License Agreement entered into on September 10, 2014. Under the terms of the Pioneer Agreement, we and Pioneer cross-licensed background CRISPR intellectual property portfolios. Pioneer granted us an exclusive worldwide license, with the right to sublicense, to its background CRISPR intellectual property in the field of research tools, and a non-exclusive license, with the right to sublicense, for CRISPR in therapeutics and all fields outside of the Pioneer field, including in the field of human and animal therapeutics. We granted Pioneer an exclusive license, with the right to sublicense, to our background CRISPR intellectual property, including the CVC IP discussed below, in certain agricultural crops, specified microorganisms, a defined industrial bio field, and certain nutrition and health applications, or the Pioneer Exclusive Field, and a non-exclusive license, with the right to sublicense, to Pioneer for CRISPR in fields outside of research reagents. The Pioneer Agreement continues until the expiration, abandonment, or invalidation of the last patent or patent application within the licensed intellectual property; provided, however, that the parties may terminate the Pioneer Agreement by mutual consent or either party may unilaterally terminate the Pioneer Agreement in the event of an uncured breach of a payment obligation, bankruptcy, or failure to maintain or own licensed intellectual property by the other party in the event the non-breaching party is materially adversely affected by such failure. Under the terms of the Pioneer Agreement, we are obligated to pay low-single-digit percent royalties to Pioneer for our research tool products as well as certain sublicensing revenue in that field. We are eligible to receive milestone payments from Pioneer in the event certain regulatory and commercial milestones are met, for a total of up to $22.4 million, related to specified row crops and we are also eligible to receive low-single-digit percent royalties for defined agricultural products and certain sublicensing revenue in that field.

The chRDNA patent family was developed under a three-year research collaboration between us and Pioneer, which ended December 31, 2016. Initially, this patent family was owned by Pioneer under the terms of the Pioneer Agreement, and we and Pioneer split the costs of patent prosecution and maintenance equally. Pioneer granted us an

exclusive license to the chRDNA patent family in the fields of human and animal therapeutics and research tools as well as a non-exclusive license in certain other fields outside of the Pioneer Exclusive Field. Through an amendment to the Pioneer Agreement, dated December 18, 2020, Pioneer assigned the chRDNA patent family to us. Pioneer retained all of its existing rights (including its sublicensing rights) to the chRDNA patent family despite the change in ownership. As consideration for the assignment, we made an upfront payment of $0.5 million and are obligated to pay all patent prosecution and maintenance costs going forward; up to $2.8 million in regulatory milestones for therapeutic products developed by us, our affiliates, and licensees; up to $20.0 million in sales milestones over a total of four therapeutics products sold by us, our affiliates, and licensees; and a percentage of sublicensing revenues received by us for licensing the chRDNA patent family. The sublicensing agreements that we entered into prior to December 18, 2020 (for example, the Intellia Agreement discussed below) are not subject to these economics; however, this amendment is applicable to the AbbVie Agreement.

Intellia Therapeutics, Inc. (Intellia)

On July 16, 2014, we entered into a License Agreement with Intellia, LLC (now Intellia Therapeutics, Inc.), or the Intellia Agreement, as amended, under which we granted Intellia an exclusive worldwide license, with the right to sublicense, to certain CRISPR-Cas9 technology for a defined field of human therapeutics in exchange for Intellia stock. The Intellia Agreement included a license to certain of our future CRISPR-Cas9 intellectual property until such time as our direct or indirect ownership percentage in Intellia dropped below 10%, called the IP cut-off date, which occurred on January 30, 2018. Intellia granted us an exclusive worldwide license, with the right to sublicense, to its CRISPR-Cas9 technology for all fields outside of the defined field of human therapeutics, including a license to certain of Intellia's future CRISPR-Cas9 intellectual property until the IP cut-off date. Each party had the right to opt-in to any licenses in its field of use entered into by the other party prior to the IP cut-off date, subject to the terms and conditions of such license, and Intellia opted in to our Pioneer Agreement and thus has a license to the Pioneer background CRISPR-Cas9 intellectual property. As discussed in the "Legal Proceedings" section, in an interim decision, an arbitration panel ruled that our chRDNA patent family, as it pertains to Cas9 chRDNAs, is part of our exclusive license to Intellia; however, the arbitration panel granted us an exclusive leaseback for our CB-010 product candidate. Under the Intellia Agreement, each party is responsible for 30% of the other party's expenses for prosecution and maintenance of the licensed intellectual property, including 30% reimbursement of the patent prosecution and maintenance costs that we pay to UC/Vienna as described below. The milestones and royalties set forth in the Intellia Agreement are those in the UC/Vienna Agreement and so we pass through any payments received from Intellia to UC/Vienna. The Intellia Agreement continues for the life of the licensed patents and patent applications; provided, however that either party may terminate upon the occurrence of certain events.

In 2018, Intellia initiated an arbitration proceeding over whether two patent families relating, respectively, to CRISPR-Cas9 chRDNA guides and Cas9 scaffolds, were included in the Intellia Agreement. In 2019, we received an interim award from the arbitration panel determining that both patent families are included in the Intellia Agreement, but the panel granted us an exclusive leaseback to Cas9 chRDNA guides under economic terms to be negotiated by the parties. In 2020, the arbitration panel clarified that the leaseback relates solely to our CB-010 product candidate and, on June 16, 2021, the parties entered into a leaseback agreement, or the Leaseback Agreement, which resolved the dispute between the parties. Pursuant to the Leaseback Agreement, in exchange for Intellia's grant to us of an exclusive license to certain intellectual property relating to Cas9 chRDNAs for use in our CB-010 product candidate, we will pay Intellia an upfront payment, potential future regulatory and sales milestones, and single-digit percent royalties on net sales of our CB-010 product candidate by us, our affiliates, and sublicensees until the expiration, abandonment, or invalidation of the last patent within the intellectual property relating to the Cas9 chRDNAs (*i.e.*, 2036, without patent term adjustment or patent term extension).

The Regents of the University of California (UC) and the University of Vienna (Vienna)

On April 16, 2013, we entered into an Exclusive License for Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription with UC and Vienna, or the UC/Vienna Agreement, as amended, under which we received an exclusive worldwide license, with the right to sublicense, in all fields to the foundational CRISPR-Cas9 patent family co-owned by UC, Vienna, and Dr. Emmanuelle Charpentier, or the CVC IP. Dr. Charpentier has not granted us any rights to the CVC IP, either directly or indirectly. The UC/Vienna Agreement continues until the last-to-expire patent or last-to-be-abandoned patent application of the CVC IP; provided, however, that UC/Vienna may terminate the UC/Vienna Agreement upon the occurrence of certain events, including our uncured material breach of a material term of the UC/Vienna Agreement, and we may terminate the UC/Vienna Agreement at our sole discretion upon written notice. Without patent term adjustment or patent term extension, the CVC IP will expire in 2033. The UC/Vienna Agreement includes certain diligence milestones that we must meet. For products and services sold by us that are covered by the CVC IP, we will owe low- to mid-single-digit percent royalties on net sales, subject to a minimum annual royalty. Prior to such time that we are selling products, we owe UC/Vienna an annual license maintenance fee. We may owe UC/Vienna up to $3.6 million in certain regulatory and clinical milestone payments in the field of human therapeutics and diagnostics for products developed by us, our affiliates, and sublicensees. Additionally, we pay UC/Vienna a specified percentage of sublicensing revenue we receive including cash and equity under our sublicensing agreements, subject to certain exceptions. If we include intellectual property owned or controlled by us in such sublicense, we pay UC/Vienna a low-double-digit percentage of sublicensing revenues received under the sublicense. If we do not include intellectual property owned or controlled by us in such sublicense, we pay UC/Vienna 50% of sublicensing revenues received under the sublicense. To date, we have entered into over 20 sublicensing agreements in a variety of fields such as human therapeutics, forestry, agriculture, research reagents, transgenic animals, certain livestock targets, internal research, bioproduction, cell lines, and microbial applications that include the CVC IP as well as other Cas9 intellectual property owned or controlled by us. We are obligated to reimburse UC for its prosecution and maintenance costs of the CVC IP.

On December 15, 2016, we entered into a Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement, or IMA, with UC, Vienna, Dr. Emmanuelle Charpentier, Intellia Therapeutics, CRISPR Therapeutics AG, ERS Genomics Ltd., and TRACR Hematology Ltd. relating to the CVC IP. Under the IMA, each of the owners of the CVC IP (*i.e.*, UC, Vienna, and Dr. Charpentier) retroactively consented to all licenses and sublicenses granted by the other owners and their licensees and also gave prospective consent to any licenses and sublicenses that may be granted in the future. Additionally, the IMA provides for, among other things, (a) good faith cooperation among the parties regarding patent maintenance, defense, and prosecution of the CVC IP; (b) cost-sharing under which CRISPR Therapeutics AG reimburses us for 50% of what we reimburse UC for patent prosecution and maintenance costs; and (c) notice of and coordination in the event of third-party infringement of the subject patents and with respect to certain adverse claimants of the CRISPR-Cas9 intellectual property. Unless earlier terminated by the parties, the IMA will continue in effect until the later of the last expiration or abandonment date of the CVC IP.

On March 14, 2019, we entered into a Memorandum of Understanding, or MOU, with UC/Vienna, wherein we agreed that, for sublicensees in the fields of human therapeutics and companion diagnostics, we would pay UC/Vienna the royalties and milestones set forth in the UC/Vienna Agreement for products sold by our sublicensees, not the specified percentage of such sublicensing income received by us. We also agreed to various provisions that would be included in all future sublicensing agreements, including specific provisions for exclusive sublicenses.

Intellectual Property

We strive to protect and enhance the proprietary technologies that we believe are important to our business by seeking patents to cover our platform technology. We also rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. Our success

will depend significantly on our ability to obtain and maintain patent and trade secret protection for our technology, our ability to defend and enforce our intellectual property rights and our ability to operate without infringing any valid and enforceable intellectual property rights of third parties.

As of the date of this prospectus, we own 48 issued U.S. patents, including 7 U.S. patents covering our chRDNA technology; 209 issued foreign patents; and 93 pending patent applications throughout the world. The patent portfolio owned by us includes U.S. and foreign patents and patent applications covering methods and compositions relating to our Cas9 chRDNA and Cas12a chRDNA guides (which, without patent term adjustment or patent term extension, will expire in 2036). Additionally, our portfolio includes U.S. and foreign patents and patent applications covering methods and compositions relating to the anti-BCMA binding domain of our CB-011 product candidate (which, without patent term adjustment or patent term extension, will expire in 2040). In general, we file our patent applications in the United States and the European Patent Office as well as in numerous other foreign patent jurisdictions. We have exclusively in-licensed intellectual property covering the anti-CD371 binding domains of our CB-012 product from MSKCC (which, without patent term adjustment or patent term extension, will expire in 2040).

Additionally, we have extensive patent protection on CRISPR Type I systems, CRISPR-Cas9 methods and compositions, and other genome-editing technologies. The patent term in the United States and other countries is 20 years from the date of filing of the first non-provisional application to which priority is claimed. In the United States, patent term may be lengthened by patent term adjustment, or PTA, which compensates a patentee for administrative delays by the United States Patent and Trademark Office in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent. Additionally, under the Hatch-Waxman Act, the term of a patent that covers an FDA-approved biologic may also be eligible for a patent term extension, or PTE, of up to five years, which is designed to compensate for the patent term lost during clinical trials and the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent claiming the drug product, methods of use or methods of manufacturing may be restored. Moreover, a patent can only be restored once, and thus, if a single patent is applicable to multiple products, it can only be extended based on one product. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved product. Without any patent term extension, the earliest expiration dates of our granted U.S. patents are in 2032 and the latest expiration dates of our granted U.S. patents are in 2040.

As of May 31, 2021, our trademark portfolio contains 12 trademark registrations, including four U.S. trademark registrations. We have registered “CARIBOU,” “CARIBOU BIOSCIENCES,” and the Caribou logo as trademarks in relevant classes and jurisdictions in the United States, European Union, and United Kingdom.

Furthermore, we rely upon trade secrets, know-how, continuing technological innovation and potential in-licensing opportunities to develop and maintain our competitive position. We seek to protect these trade secrets and other proprietary technology, in part, by entering into confidentiality agreements with parties who have access to them. We also enter into confidentiality and invention assignment agreements with our employees and our agreements with consultants include invention assignment obligations.

Competition

We currently compete across the fields of genome editing and cell therapy. We believe that our novel and proprietary chRDNA genome-editing platform has broad potential applicability across human therapeutic indications, and our strategy is to demonstrate our platform’s capability by first developing improved allogeneic cell therapies in hematologic oncology indications.

The biopharmaceutical industry, and in particular the genome-editing and cell therapy fields, are characterized by intense investment and competition aimed at rapidly advancing new technologies. Our platform and therapeutic product candidates are expected to face substantial competition from multiple technologies, marketed products, and numerous other therapies being developed by other biopharmaceutical companies, academic research institutions, governmental agencies, and private research institutions. Many of our competitors

have substantially greater financial, technical, and other resources, such as larger research and development staff, established manufacturing capabilities and facilities, and experienced marketing organizations with well-established sales forces. In addition, there is substantial patent infringement litigation in the biopharmaceutical industry and, in the future, we may bring or defend such litigation against our competitors.

Compared to first generation genome-editing approaches, our chRDNA platform has shown improved specificity, a reduction in off-target edits and translocations and advanced capability to perform multiplexed edits, in particular multiplexed insertions. While we believe that our scientific expertise, novel technology, and intellectual property position offer competitive advantages, we face competition from multiple other genome-editing technologies and companies. Other companies developing CRISPR-based technologies include, among others, Beam Therapeutics Inc., CRISPR Therapeutics AG, Editas Medicine, Inc., Intellia Therapeutics, Inc., Metagenomi Technologies, LLC, Poseida Therapeutics, Inc., and Scribe Therapeutics, Inc. Companies developing other genome-editing technologies include, among others, Allogene Therapeutics, Inc., bluebird bio, Inc., Cellectis S.A., Precision BioSciences, Inc., and Sangamo Therapeutics, Inc.

We believe that our CAR-T cell therapy product candidates have the potential to offer a superior product to patients due to genome edits we make to improve their persistence with the goal of extending robust CAR-T cell antitumor activity in patients. Additionally, our pioneering scientific expertise in iPSC-derived NK cells sets the foundation for our first CAR-iNK cell therapy to target and antigen present on multiple solid tumor malignancies. Due to the promising therapeutic effect of cell therapies, and the potential benefit of allogeneic treatment alternatives, we expect increasing competition from new and existing companies across four major fronts, which include, among others:

- *Autologous T cell therapy*: Adaptimmune Therapeutics plc, Autolus Therapeutics plc, bluebird, Bristol-Myers Squibb Company, Gracell Biotechnologies Inc., Kite, a Gilead Company, Novartis International AG, Poseida, TCR2 Therapeutics Inc., and Vor Biopharma Inc.;

- *Allogeneic T cell therapy*: Allogene, Atara Biotherapeutics, Inc., Cellectis, Celyad Oncology SA, CRISPR Therapeutics, Fate Therapeutics, Inc., Gracell, Kite, Legend Biotech Corporation, Poseida, Precision Bio, Sana Biotechnology, Inc., and Vor;

- *Allogeneic NK therapy*: Artiva Biotherapeutics, Inc., Celularity Inc., Editas, Fate, Fortress Biotech, Inc., ImmunityBio, Inc., Nkarta, Inc., NKGen Biotech, Inc., and Takeda Pharmaceutical Company Limited;

- *Other cell therapies:* Other companies are developing CAR-expressing immune cell therapies derived from natural killer T cells, or NKT cells, including Kuur Therapeutics; from macrophages, including Carisma Therapeutics; and from gamma-delta T cells, including Adicet Bio, GammaDelta Therapeutics, Cytomed Therapeutics, TC Biopharm, Hebei Senlang Biotechnology, and Beijing Doing Biomedical Technology Co., Ltd.; and

- *Other oncology therapeutics*: Multiple biotechnology and pharmaceutical companies developing other directly competitive technologies, such as small molecule, antibody, bi-specific antibody, and antibody-drug conjugates.

Government Regulation

As a biotechnology company, we are subject to extensive legal and regulatory requirements. For example, we may need approval from regulatory agencies for our research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting and import and export of our product candidates. Relevant regulatory authorities include, but are not limited to, the FDA, the European Medicines Agency, or EMA, an agency of the European Union in charge of the evaluation and supervision of medicinal products, the European Commission, which is the executive arm of the European Union, or EU, and other national regulatory authorities. The United States and certain jurisdictions outside the United States also regulate the pricing and reimbursement of such products. The processes for obtaining marketing approvals in the United States and in other countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

Licensure and Regulation of Biologics in the United States

In the United States, our product candidates are regulated as biological products, or biologics, under the Public Health Service Act, or the PHSA, and the Federal Food, Drug, and Cosmetic Act, or the FDCA, and their implementing regulations promulgated by the FDA. The failure to comply with the applicable requirements at any time during the product development process, including nonclinical testing, clinical testing, the approval process, or post-approval process, may subject us to delays in the conduct of a clinical trial, regulatory review and approval, and/or subject us to administrative or judicial sanctions. Such sanctions may include, but are not limited to, the FDA's refusal to allow us to proceed with clinical testing of our product candidates, refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, receipt of untitled or warning letters, adverse publicity, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, and civil or criminal investigations and penalties brought by the FDA or the U.S. Department of Justice or other governmental entities.

As we seek approval to market and distribute a new biologic in the United States, we generally must satisfactorily complete each of the following steps:

- preclinical laboratory tests, animal studies, and formulation studies all performed in accordance with the FDA's current Good Laboratory Practice, or cGLP, regulations;
- manufacture of clinical investigational product according to current cGMPs;
- submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical trial site before each clinical trial may be initiated, or by a central IRB if appropriate;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication, in accordance with the FDA's current Good Clinical Practice, or cGCP, regulations;
- preparation and submission to the FDA of a BLA for marketing approval of our product candidates for one or more proposed indications, including submission of detailed information on the manufacture and composition of our product candidates and proposed labeling;
- review of the BLA by an FDA advisory committee, where applicable;
- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities, including those of any third-party manufacturers, at which the product, or components thereof, are produced in order to assess compliance with cGMP requirements and to ensure that the facilities, methods, and controls are adequate to preserve the product's identity, strength, quality, and purity, and, if applicable, the FDA's current Good Tissue Practice, or cGTP, for the use of human cell and tissue products;
- satisfactory completion of any FDA audits of clinical trial sites to ensure compliance with cGCPs and the integrity of clinical data in support of the BLA;
- payment of user fees and securing FDA approval of the BLA; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, adverse event reporting, and compliance with any post-approval studies required or requested by the FDA.

Preclinical Studies and Investigational New Drug Application

Before testing any investigational biologic product candidate in humans, our product candidates must undergo preclinical testing. Preclinical tests include laboratory evaluations of product chemistry, formulation, and stability, as well as studies to evaluate the potential for safety, efficacy, and toxicity in animals. The conduct of the preclinical tests and the formulation of the compounds for use in the preclinical testing must comply with federal regulations and/or requirements. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND application. An IND is an exemption from the restrictions of the FDCA which permits an unapproved biologic product candidate to be shipped in interstate commerce for use in an investigational clinical trial. The FDA will notify us within 30 days after receipt of our IND application whether we are cleared to begin human clinical trials, unless before that time the FDA has concerns or questions about our product or conduct of the proposed clinical trial, including concerns that human research subjects would be exposed to unreasonable and significant health risks. In such case, we and the FDA must resolve any outstanding concerns before the clinical trials can begin.

If the FDA raises concerns or questions either during this 30-day period, including safety concerns or concerns due to regulatory non-compliance, the FDA may impose a partial or complete clinical hold with respect to our product. Such a clinical hold would delay either a proposed clinical trial, or cause suspension of an ongoing clinical trial, until all outstanding concerns have been adequately addressed, and the FDA has notified us that our clinical trials may proceed or recommence authorized by the FDA.

Human Clinical Trials in Support of a BLA

Our clinical trials involve the administration of our product candidate to patients with the disease to be treated and are conducted under the supervision of a qualified principal investigator in accordance with cGCP requirements. Clinical trials are conducted under study protocols detailing, among other things, the objectives of the clinical trial, inclusion, and exclusion criteria, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and subsequent protocol amendments must be submitted to the FDA as part of the IND.

If we wish to conduct a clinical trial outside of the United States, we may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. When a foreign clinical trial is conducted under an IND, all of the FDA's IND requirements must be met unless waived. If a non-United States clinical trial is not conducted under an IND, we may submit data from a well-designed and well-conducted clinical trial to the FDA in support of our BLA, so long as the clinical trial is conducted in compliance with cGCP and the FDA is able to validate the data from the clinical trial and/or through an onsite inspection if the FDA deems it necessary.

For clinical trials conducted in the United States, each clinical trial must be reviewed and approved by an institutional review board, or IRB, either centrally or individually at each institution at which our clinical trials will be conducted. The IRB will consider, among other things, our clinical trial design, subject informed consent, ethical factors, and the safety of human subjects. The IRB must operate in compliance with FDA regulations governing IRBs. The FDA, the applicable IRB, or we may suspend or terminate a clinical trial at any time for various reasons, including a finding that the clinical trial is not being conducted in accordance with FDA requirements or that the subjects or patients are being exposed to an unacceptable health risk. Some clinical trials receive additional oversight by an independent group of qualified experts organized by us, known as a data safety monitoring board or committee. This group receives and reviews data arising from the clinical trial on an ongoing basis, and may recommend continuation of the clinical trial as planned, changes in clinical trial conduct, or cessation of the clinical trial at designated check points based on such data.

Clinical trials typically are conducted in three sequential phases; however, the phases may overlap or may be combined.

- Phase 1 clinical trials are initially conducted in a limited population of healthy humans or, for our products, in patients, such as cancer patients, in order to test the product candidate for safety, including adverse effects, dose tolerance, absorption, metabolism, distribution, excretion, and pharmacodynamics, and to identify a recommended phase 2 dose.

- Phase 2 clinical trials are generally conducted in a limited patient population to identify possible adverse effects and safety risks, evaluate the efficacy of the product candidate for specific targeted indications, and to determine dose tolerance and optimal dosage. We may conduct multiple phase 2 clinical trials to obtain information prior to beginning larger and costlier phase 3 clinical trials. The phase 2 clinical trial for our product candidates may serve as the pivotal trial, in which case a phase 3 clinical trial will not be necessary.

- Phase 3 clinical trials are undertaken within an expanded patient population to further evaluate dosage and gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the drug and to provide an adequate basis for physician labeling.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data and clinical trial investigators. Annual progress reports detailing the status of clinical trials must be submitted to the FDA. Written IND safety reports must be submitted to the FDA and the investigators within 15 calendar days of receipt by us after determining that the information qualifies for such expedited reporting. IND safety reports are required for serious and unexpected suspected adverse events, findings from other studies or animal or *in vitro* testing that suggest a significant risk to humans in our clinical trials, and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Additionally, we must notify FDA within seven calendar days after receiving information concerning any unexpected fatal or life-threatening suspected adverse reaction. Other external events may occur that can affect the conduct of our clinical trials, such as the COVID-19 pandemic or government shutdowns.

In some cases, the FDA may approve a BLA for our product candidate but require us to conduct additional clinical trials to further assess the product candidate's safety and effectiveness after approval. Such post-approval trials are typically referred to as phase 4 clinical trials. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication and to document a clinical benefit in the case of biologics approved under accelerated approval regulations. Failure to exhibit due diligence with regard to conducting phase 4 clinical trials could result in withdrawal of approval for our products. Additionally, a phase 4 clinical trial could be implemented in an effort to evaluate other medical indications for a therapy.

There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries, such as such as *www.ClinicalTrials.gov*. We are required to register and disclose certain clinical trial information, including the product information, patient population, phase of investigation, clinical trial sites and investigators, and other aspects of the clinical trial on *www.ClinicalTrials.gov*. We are also obligated to disclose the results of our clinical trials after completion. Disclosure of the results of these clinical trials can be delayed until the new product or new indication being studied has been approved, up to a maximum of two years.

Compliance with cGMP and cGTP requirements

Before approving a BLA, the FDA typically will inspect the facility or facilities where our product candidates are manufactured. The FDA will not approve a BLA unless it determines that the manufacturing processes and facilities are in full compliance with cGMP requirements and adequate to ensure consistent production of the product within required specifications. The PHSA emphasizes the importance of manufacturing

control for products like biologics whose attributes cannot be precisely defined. Material changes in manufacturing equipment, location, or process post-approval may result in additional regulatory review and approval.

The FDA also will not approve the product if we are not in compliance with cGTP, which are requirements found in FDA regulations that govern the methods used in, and the facilities and controls used for, the manufacture of human cells, tissues, and cell and tissue-based products, or HCT/Ps, which are human cells or tissue intended for implantation, transplant, infusion, or transfer into a human recipient. The primary intent of the cGTP requirements is to ensure that cell- and tissue-based products are manufactured in a manner designed to prevent the introduction, transmission, and spread of communicable disease. FDA regulations also require tissue establishments to register and list their HCT/Ps with the FDA and, when applicable, to evaluate donors through screening and testing.

Manufacturers and others involved in the manufacture and distribution of our products must also register their establishments with the FDA and certain state agencies for products intended for the United States market, and with analogous health regulatory agencies for products intended for other markets globally. Both U.S. and non-U.S. manufacturing establishments must register and provide additional information to the FDA and/or other health regulatory agencies upon their initial participation in the manufacturing process. Any product manufactured by or imported from a facility that has not registered, whether in the United States or not, is deemed misbranded under the FDCA, and could be affected by similar as well as additional compliance issues in other jurisdictions. Manufacturers may be subject to periodic unannounced inspections by government authorities to ensure compliance with cGMPs and other laws. Manufacturers may also have to provide, on request, electronic, or physical records regarding their establishments. Delaying, denying, limiting, or refusing inspection by the FDA or other governing health regulatory agency may lead to a product being deemed to be adulterated. If a manufacturing facility is not in substantial compliance with the applicable regulations and requirements imposed when our product was approved, regulatory enforcement action may be taken, which may include a warning letter or an injunction against shipment of products from the facility and/or recall of products previously shipped.

Review and Approval of a BLA

The results of product candidate development, preclinical testing, and clinical trials, including negative or ambiguous results as well as positive findings, are submitted to the FDA as part of a BLA requesting a license to market our product. Under United States law, the submission of most BLAs is subject to an application user fee and an approved BLA is also subject to an annual program fee. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for products with orphan designation and a waiver for certain small businesses.

The FDA has 60 days after submission of a BLA to conduct an initial review to determine whether the BLA is sufficient to accept for filing based on the agency’s threshold determination that the BLA is sufficiently complete to permit substantive review. Once the submission has been accepted for filing, the FDA begins an in-depth review of the application. Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act, or the PDUFA, the FDA has ten months in which to complete its initial review of a standard application and respond to us, and six months for a priority review of the application. The FDA does not always meet its PDUFA goal dates for standard and priority BLAs. The review process may often be significantly extended by FDA requests for additional information or clarification. The review process and the PDUFA goal date may be extended by three months if the FDA requests, or if we otherwise provide through the submission of a major amendment, additional information or clarification regarding information already provided in the submission within the last three months before the PDUFA goal date.

Under the PHSA, the FDA may approve a BLA if it determines that our product is safe, pure, and potent and the facility where our product will be manufactured meets standards designed to ensure that it continues to be safe, pure, and potent.

On the basis of the FDA's evaluation of the application and accompanying information, including the results of the inspection of the manufacturing facilities and any FDA audits of nonclinical study and clinical trial sites to ensure compliance with cGMPs and cGCPs, respectively, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of our product with specific prescribing information for specific indications. If our BLA is not approved, the FDA will issue a complete response letter, which will contain the conditions that must be met in order to secure final approval of the application and, when possible, will outline recommended actions we might take to obtain approval of our BLA. If we receive a complete response letter, we may submit to the FDA information that represents a complete response to the issues identified by the FDA. Such resubmissions are classified under the PDUFA as either Class 1 or Class 2. The classification of a resubmission is based on the information submitted by us in response to an action letter. Under the goals and policies agreed to by the FDA under the PDUFA, the FDA has two months to review a Class 1 resubmission and six months to review a Class 2 resubmission. The FDA will not approve an application until issues identified in the complete response letter have been addressed. Alternatively, if we receive a complete response letter, we may either withdraw our BLA or request a hearing.

The FDA may also refer our BLA to an advisory committee for review, evaluation, and recommendation as to whether our BLA should be approved. In particular, the FDA may refer applications for biologic products that present difficult questions of safety or efficacy to an advisory committee. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates, and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

If the FDA approves our product, it may limit the approved indications for use of our product. The FDA may also require that contraindications, warnings, or precautions be included in the product labeling. In addition, the FDA may call for post-approval studies, including phase 4 clinical trials, to further assess the product's safety after approval. The FDA may also require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, to help ensure that the benefits of the product outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, specific or special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patent registries. The FDA may prevent or limit further marketing of a product based on the results of post-marketing studies or surveillance programs. After approval, many types of changes to the approved product, such as adding new indications, certain manufacturing changes, and additional labeling claims, are subject to further testing requirements and FDA review and approval.

Fast Track, Breakthrough Therapy, Priority Review, and Regenerative Medicine Advanced Therapy Designations

The FDA is authorized to designate certain products for expedited review if such products are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. These programs include fast track designation, breakthrough therapy designation, priority review, and regenerative medicine advanced therapy designation. These designations are not mutually exclusive, and our product candidates may qualify for one or more of these programs. While these programs are intended to expedite product development and approval, they do not alter the standards for FDA approval.

The FDA may designate our product candidate for fast track review if our product candidate is intended, whether alone or in combination with one or more other products, for the treatment of a serious or life-threatening disease or condition, and it can be demonstrated that our product has the potential to address unmet medical needs for such a disease or condition. For fast track product candidates, we may have greater interactions with the FDA, and the FDA may initiate review of sections of our fast track product candidate's application

before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by us, that a fast track product candidate may be effective. We must also provide, and the FDA must approve, a schedule for the submission of the remaining information, and we must pay applicable application user fees. However, the FDA's time period goal for reviewing a fast track application does not begin until the last section of the application is submitted. In addition, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process, or if our designated product candidate development program is no longer being pursued.

Our products may be designated as breakthrough therapies if they are intended, either alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that our products may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to breakthrough therapies, including holding meetings with us throughout the development process, providing timely advice to us regarding development and approval, involving more senior staff in the review process, assigning a cross-disciplinary project lead for the review team, and taking other steps to design the clinical trials in an efficient manner. Breakthrough designation may be rescinded if our product candidate no longer meets the qualifying criteria.

The FDA may designate our product candidate for priority review if our product candidate treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness of the treatment, prevention, or diagnosis of such condition. The FDA makes such determination on a case-by-case basis, compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting adverse reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. A priority designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from ten months to six months.

The FDA may designate our product candidates as regenerative medicine advanced therapies if our product candidates are regenerative medicine therapies intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition and preliminary clinical evidence indicates that our product candidates have the potential to address unmet medical needs for such disease or condition. The benefits of a regenerative medicine advanced therapy designation include early interactions with the FDA to expedite development and review, benefits available to breakthrough therapies, potential eligibility for priority review, and accelerated approval based on surrogate or intermediate endpoints. Regenerative medicine advanced therapy designation may be rescinded if our products no longer meet the qualifying criteria.

Accelerated Approval Pathway

The FDA may grant accelerated approval to our product candidates for a serious or life-threatening condition that provides meaningful therapeutic advantage to patients over existing treatments based upon a determination that our product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such a condition when our product candidate has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, or IMM, and that our product candidate is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition, and the availability or lack of alternative treatments. Product candidates granted accelerated approval must meet the same statutory standards for safety and efficacy as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly

than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a product candidate, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints but has indicated that such endpoints generally could support accelerated approval where a clinical trial demonstrates a relatively short-term clinical benefit in a chronic disease setting in which assessing durability of the clinical benefit is essential for traditional approval, but the short-term benefit is considered reasonably likely to predict long-term benefit.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a product candidate, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly. Thus, accelerated approval has been used extensively in the development and approval of products for treatment of a variety of cancers in which the goal of therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is usually contingent on our agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe our product's clinical benefit. As a result, a product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, would allow the FDA to withdraw the product from the market on an expedited basis. All promotional materials for product candidates approved under accelerated regulations are subject to prior review by the FDA unless the FDA informs us otherwise.

Post-approval Regulation

If regulatory approval for marketing of our product or new indication for an existing product of ours is obtained, we will be required to comply with all regular post-approval regulatory requirements as well as any post-approval requirements that the FDA has imposed as part of the approval process. We will be required to report certain adverse reactions and manufacturing problems to the FDA, provide updated safety and efficacy information and comply with requirements concerning advertising and promotional labeling requirements. Manufacturers of our products are required to register their establishments with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMP regulations, which impose certain procedural and documentation requirements upon these manufacturers. Accordingly, we and our third-party manufacturers must continue to expend time, money and effort in the areas of production and quality control to maintain compliance with cGMP regulations and other regulatory requirements.

Our products may also be subject to official lot release, meaning that the manufacturer of our products is required to perform certain tests on each lot of the product before the product is released for distribution. If the product is subject to official lot release, the manufacturer must submit samples of each lot, together with a release protocol showing a summary of the history of manufacture of the lot and the results of all of the manufacturer's tests performed on the lot, to the FDA. The FDA may in addition perform certain confirmatory tests on lots of some products before releasing the lots for distribution.

Once a marketing approval is granted for our products, the FDA may withdraw the approval if compliance with regulatory requirements is not maintained or if problems occur after our products reach the market. Later discovery of previously unknown problems with our product, including adverse events of unanticipated severity or frequency, issues with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information, imposition of post-marketing studies or clinical trials to assess new safety risks, or imposition of distribution or other restrictions under a REMS program.

Other potential consequences of a failure to comply with regulatory requirements include:

- restrictions on the marketing or manufacturing of our product, complete withdrawal of our product from the market, or product recalls;
- fines, untitled or warning letters, or holds on post-approval clinical trials;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of our product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising, and promotion of licensed and approved products that are placed on the market. Pharmaceutical products may be promoted only for the approved indications and in accordance with the provisions of the approved label. Although health care providers may prescribe products for off-label uses in their professional judgment, we will be prohibited from soliciting, encouraging, or promoting unapproved uses of our products. Although it may be permissible, under very specific, narrow conditions, for us to engage in non-promotional, non-misleading communication regarding off-label information, such as distributing scientific or medical journal information, the FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and if we are found to have improperly promoted off-label uses, we may be subject to significant liability.

Orphan Drug Designation

Orphan drug designation in the United States is designed to encourage companies to develop products intended for rare diseases or conditions. Pursuant to 21 U.S.C. § 360aa, a rare disease or condition is defined as a condition that affects fewer than 200,000 individuals in the United States or a disease or condition that affects more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available a biologic for the disease or condition will be recovered from sales of the product in the United States. For a biologic to qualify for orphan designation both the biologic and the disease or condition must meet certain criteria specified in the Orphan Drug Act and the FDA's implementing regulations at 21 CFR § 316.

Orphan drug designation would qualify us for financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. In addition, if our product candidate receives the first FDA approval for the indication for which it has orphan designation, our product will be entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same orphan indication for a period of seven years following the date of our product's marketing approval, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity or where we are unable to ensure sufficient quantities of the approved orphan drug product. If a biologic or drug designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity.

An application for designation as an orphan product can be made any time prior to the filing of an application for approval to market the product. The FDA's Office of Orphan Products Development, or OOPD, is responsible for approving designation requests. To seek orphan designation, we must submit a request for designation to OOPD with the information required in 21 CFR §§316.20 and 316.21. The granting of an orphan designation request does not alter the standard regulatory requirements and process for obtaining marketing approval. After obtaining an orphan drug designation, our product candidate must then go through the review and approval process for commercial distribution like any other product. Safety and effectiveness of our product candidates must be established through adequate and well-controlled studies.

We may request orphan drug designation of a previously unapproved product or new orphan indication for an already marketed product. In addition, if our product is otherwise the same product as an already approved orphan drug, we may seek and obtain orphan drug designation for the subsequent product for the same rare disease or condition if we can present a plausible hypothesis that its product may be clinically superior to the first drug. More than one sponsor may receive orphan drug designation for the same product candidate for the same rare disease or condition, but each sponsor seeking orphan drug designation must file a complete request for designation with the OOPD.

The period of exclusivity begins on the date that the marketing application is approved by the FDA and applies only to the indication for which the product has been designated. The FDA may approve a second application for the same product for a different use or a second application for a clinically superior version of the product for the same use. The FDA cannot, however, approve the same product made by another manufacturer for the same indication during the market exclusivity period unless it has the consent of the sponsor or the sponsor is unable to provide sufficient quantities.

Pediatric Studies and Exclusivity

Under the Pediatric Research Equity Act of 2003, or PREA, as amended, a BLA or supplement to a BLA, for a product candidate with certain novel characteristics must contain data to assess the safety and effectiveness of the product candidate for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product candidate is safe and effective. The Food and Drug Administration Safety and Innovation Act of 2012, or FDASIA, requires that if we are planning to submit a marketing application for a biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration, we must submit an initial Pediatric Study Plan, or PSP, within 60 days after an end-of-phase 2 meeting or as may be agreed between us and the FDA.

The initial PSP must include, among other things, an outline of the pediatric study or studies that we plan to conduct, including, to the extent practicable, study objectives and design, age groups, relevant endpoints, and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information, along with any other information specified in FDA regulations. The FDA and we must reach agreement on the PSP. We can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from nonclinical studies, early phase clinical trials or other clinical development programs.

The FDA may, on its own initiative or at our request, grant deferrals for submission of some or all pediatric data until after approval of our product candidate for use in adults, or full or partial waivers from the pediatric data requirements. Unless otherwise required by regulation, PREA does not apply to product candidates with orphan designation, although, as of 2018, the FDA is no longer granting any additional pediatric-subpopulation orphan drug designations. Notably, PREA will apply to a BLA for a new active ingredient that is orphan-designated if the biologic is a molecularly targeted cancer product intended for the treatment of an adult cancer and is directed at a molecular target that the FDA determines to be substantially relevant to the growth or progression of a pediatric cancer.

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan exclusivity. This six-month exclusivity may be granted if we submit pediatric data that sufficiently responds to a written request from the FDA for such data. The data do not need to show our product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to be responsive to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or

regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension; instead, this grant of exclusivity extends the regulatory period during which the FDA cannot approve another application.

Biosimilars and Exclusivity

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or the Affordable Care Act, signed into law on March 23, 2010, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product in the United States. Starting in 2015, the FDA commenced licensing biosimilars under the BPCIA, and there are currently numerous biosimilars approved in the United States and Europe.

In order for the FDA to approve a biosimilar product, it must find that there are no clinically meaningful differences between the reference product and proposed biosimilar product in terms of safety, purity, and potency. For the FDA to approve a biosimilar product as interchangeable with a reference product, the agency must find that the biosimilar product can be expected to produce the same clinical results as the reference product, and, for products administered multiple times, that the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date of approval of the reference product. The FDA may not approve a biosimilar product until 12 years from the date on which the reference product was approved. Even if a product is considered to be a reference product eligible for exclusivity, another company could market a competing version of that product if the FDA approves a full BLA for such product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity, and potency of its product.

The BPCIA, however, is complex and only beginning to be interpreted and implemented by the FDA. In addition, proposed legislation has sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation, and meaning of the BPCIA is subject to significant uncertainty.

Patent Term Extension

A patent claiming a new biologic product may be eligible for a limited patent term extension, or PTE, under the Drug Price Competition and Patent Term Restoration Act of 1984, or Hatch-Waxman Amendments, which permits a patent restoration of up to five years for patent term lost during product development and FDA regulatory review. The restoration period granted on a patent covering a product is typically one-half the time between the effective date of our IND and the submission date of our BLA, plus the time between the submission date of our BLA and the ultimate approval date, less any time we fail to act with due diligence. Patent term extension cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Pursuant to 35 U.S.C. § 156, only one patent covering an approved product, or the use or manufacture thereof, is eligible for the extension, and the application for the extension must be submitted prior to the expiration of the patent in question and within 60 days after approval. A patent that covers multiple products for which approval is sought can only be extended in connection with one of the approvals. The USPTO reviews and approves the application for any patent term extension in consultation with the FDA.

Regulation and Procedures Governing Approval of Medicinal Products in Other Countries

In order to market any product outside of the United States, we must also comply with numerous and comprehensive regulatory requirements of other countries and jurisdictions, regarding quality, safety, and

efficacy, and governing, among other things, clinical trials, marketing authorization, post-authorization requirements, commercial sales, import and export, and distribution of products. Whether or not we obtain FDA approval for our products, we will need to obtain the necessary approvals by the comparable health regulatory authorities in other countries or jurisdictions before we can initiate clinical trials or marketing of our products in those countries or jurisdictions. Specifically, the process governing approval of medicinal products in the EU generally follows the same lines as in the United States, although the approval of a medicinal product in the United States is no guarantee of approval of the same product in the EU, either at all or within the same timeframe as approval may be granted in the United States. The process entails satisfactory completion of preclinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of a product candidate for each proposed indication. It also requires the submission to the EMA or the relevant competent authorities, of a marketing authorization application, or MAA, and granting of a marketing authorization by the EMA or these authorities before the product can be marketed and sold in the EU.

Coverage, Pricing, and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we may seek regulatory approval by the FDA or other government authorities. In the United States and other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use any product candidates we may develop unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of such product candidates. In addition, direct or indirect governmental price regulation may affect the prices that we may charge for product candidates.

United States

Even if any product candidates we may develop obtain approval, sales of such product candidates will depend, in part, on the extent to which third-party payors, including government health programs in the United States, such as Medicare and Medicaid, commercial health insurers, and managed care organizations provide coverage and establish adequate reimbursement levels for such product candidates.

In general, factors a payor considers in determining coverage and reimbursement are based on whether the product is:

- a covered benefit under its health plan;
- safe, effective, and medically necessary, including its regulatory approval status;
- medically appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

In the United States, no uniform policy of coverage and reimbursement for biological products, including gene and cell therapy products, exists among third-party payors. As a result, obtaining coverage and reimbursement approval for such a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical, and cost-effectiveness data regarding the products' clinical benefits, medical necessity, and risks on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. A decision by a third-party payor not to cover any product candidates we may develop could reduce physician utilization of such product candidates once approved and have a material adverse effect on our sales, results of operations and financial condition. Additionally, a payor's decision to provide coverage for a product does not imply that an adequate

reimbursement rate will be approved, and inadequate reimbursement rates, including significant patient cost sharing obligations, may deter patients from selecting our product candidates. One payor's determination to provide coverage for a product does not assure that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payor to payor. Third-party reimbursement and coverage may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive marketing approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

In addition, the United States government, state legislatures and/or local governments are implementing health care cost containment programs, the prices of pharmaceuticals have been a focus in these efforts including price controls, restrictions on coverage and reimbursement, and requirements for substitution of generic products. Adoption of price controls and cost containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results. In addition, we expect to experience pricing pressures in connection with the sale of any of our product candidates upon their approval due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, cost containment initiatives and additional legislative changes.

European Union

In the EU, the approval process and requirements governing pricing and reimbursement for any product candidate vary greatly between countries and jurisdictions. Some countries provide that biological products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional testing or studies that compare the cost effectiveness of a particular biological product to currently available treatments, or so called health technology assessments, in order to obtain reimbursement or pricing approval.

Some countries, including a number of EU member states, set prices and reimbursement for biological products, with limited participation from the marketing authorization holders. For example, the EU provides options for its member states to restrict the range of biological products for which their national health insurance systems provide reimbursement and to control the prices of biological products for human use. EU Member States may approve a specific price for a biological product or may instead adopt a system of direct or indirect controls on the profitability of the company providing the biological product. Recently, many European countries have increased the level of discounting required in relation to the pricing of biological products and these efforts could continue as countries attempt to manage healthcare expenditures.

Healthcare Law and Regulation

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of pharmaceutical products that are granted marketing approval. Arrangements with providers, consultants, third-party payors, customers, and patients are subject to broadly applicable fraud and abuse laws including anti-kickback laws, false claims laws, and health care provider payment transparency laws, as well as data privacy and security laws and other healthcare laws that may constrain our business and/or financial arrangements.

Restrictions under applicable federal and state healthcare laws and regulations, include but are not limited to the following:

- the United States federal Anti-Kickback Statute, which prohibits, among other things, individuals or entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration, including any kickback, bribe, or certain rebates, directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease,

order, arrangement for or recommendation of the purchase, lease, order, arrangement for any good, facility, item or service, for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the federal civil and criminal false claims laws, including the civil United States False Claims Act, and civil monetary penalties laws, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false, fictitious, or fraudulent or knowingly making, using, or causing to be made or used a false record or statement to avoid, decrease, or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the United States federal Anti-Kickback Statute or FDA promotional standards constitutes a false or fraudulent claim for purposes of the United States False Claims Act. The False Claims Act also permits a private individual acting as a "whistleblower" to bring civil whistleblower or qui tam actions against individuals, including biopharmaceutical manufacturers and sellers, on behalf of the federal government alleging violations of the False Claim Act and to share in any monetary recovery. These laws impose criminal and civil penalties on violators;

- the anti-beneficiary inducement law, which prohibits, among other things, the offering or giving of remuneration, which includes, without limitation, any transfer of items or services for free or for less than fair market value, with limited exceptions, to a Medicare or Medicaid beneficiary that the person knows or should know is likely to influence the beneficiary's selection of a particular provider, practitioner, or supplier of items or services reimbursable by a federal or state health program;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private payors, or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (*e.g.*, public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services;

- HIPAA as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose, among other things, requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization. In addition, state and non-United States laws govern the privacy and security, including the use, storage, retention, protection, disclosure, transfer, and other processing of health and other personal information in certain circumstances, many of which differ from each other in significant ways and may not have the same requirements, thus complicating efforts to comply with their respective provisions;

- the physician payment transparency requirements known as the federal Physician Payments Sunshine Act, or Open Payments program, created under the Affordable Care Act, which requires certain manufacturers of drugs, devices, biologics, and medical supplies to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments, including certain product development activities such as clinical trials, and other transfers of value made by

that entity to physicians, currently defined to include doctors, dentists, optometrists, podiatrists, and chiropractors, and teaching hospitals, and requires certain manufacturers and applicable group purchasing organizations to report ownership and investment interests held by physicians or their immediate family members. Failure to submit required information may result in civil monetary penalties for all payments, transfers of value or ownership or investment interests that are not timely, accurately, and completely reported in an annual submission. Effective January 1, 2022, these reporting obligations will extend to include transfers of value made to certain non-physician providers, such as physician assistants and nurse practitioners;

- federal government price reporting laws, which require us to calculate and report complex pricing metrics in an accurate and timely manner to government programs. Such laws may not only affect coverage, reimbursement, and pricing for our product candidates, but can also result in civil penalties for late or incorrect reports;

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;

- the FDCA, which prohibits, among other things, the commercialization of adulterated or misbranded drugs and medical devices and the PHSA, which prohibits, among other things, the commercialization of biological products unless a biologics license is in effect;

- the Foreign Corrupt Practices Act which prohibits companies and their intermediaries from making, or offering or promising to make improper payments to non-United States officials for the purpose of obtaining or retaining business or otherwise seeking favorable treatment;

- certain state and other laws that require pharmaceutical companies to comply with the state standards or pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring pharmaceutical manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures;

- certain state and other laws that govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and may be broader in scope than their federal equivalents.

Numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws and federal and state consumer protection laws (*e.g.*, Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our collaborators and third-party providers. For example, California recently enacted the California Consumer Privacy Act, or the CCPA, which became effective on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Additionally, the California Privacy Rights Act, or the CPRA, recently passed in California, which will amend the CCPA to impose additional data protection obligations on companies doing business in California, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It will also create a new California data protection

agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions will go into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required. In the United States, states are constantly amending existing laws, requiring attention to frequently changing regulatory requirements.

Healthcare Reform

A primary trend in the United States healthcare industry and elsewhere is cost containment. There have been a number of federal and state proposals during the last few years that apply to the pricing of pharmaceutical and biopharmaceutical products, limit coverage and reimbursement for drugs and other medical products, standardize access to third-party insurance coverage, and address government control and other changes to the healthcare system in the United States. The federal and state governments continually propose and pass legislation designed to reduce the cost of healthcare, and future amendments and new proposals may affect the commercialization of any of our product candidates in ways that we cannot foresee.

For example, in March 2010, the United States Congress enacted the Affordable Care Act, which, among other things, sought to expand access to, and standardize, commercial insurance coverage within the United States and included changes to the coverage and payment for products under government health care programs.

Among the provisions of the Affordable Care Act that may be of importance to our potential product candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic products, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications;

- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;

- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices and extending rebate liability to prescriptions for individuals enrolled in Medicare Advantage plans;

- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for products that are inhaled, infused, instilled, implanted or injected;

- expanded the types of entities eligible for the 340B drug discount program;

- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 70% point-of-sale-discount off the negotiated price of applicable products to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient products to be covered under Medicare Part D, increased pursuant to the Bipartisan Budget Act of 2018 which became effective as of 2019;

- the establishment of a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and

- the establishment of the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription product spending.

Since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the Affordable Care Act, and we expect there will be additional challenges and amendments to the Affordable Care Act in the future. It is unclear whether the Affordable Care Act will be overturned, repealed, replaced, or further amended. We cannot predict what effect further changes to the Affordable Care Act would have on our business.

Recently, CMS finalized regulations that give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the Affordable Care Act for plans sold through such marketplaces. For example, in May 2019, CMS issued a final rule to allow Medicare Advantage Plans the option of using step therapy, a type of prior authorization, for Part B drugs beginning January 1, 2020. It is unclear what type of impact, if any, efforts such as this will have on our business in the future.

Beyond the Affordable Care Act, other legislative measures have also been enacted that may impose additional pricing and product development pressures on our business. For example, on May 30, 2018, the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a drug manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act, but the manufacturer must develop an internal policy and respond to patient requests according to that policy. We expect that additional foreign, federal, and state healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in limited coverage and reimbursement and reduced demand for our products, once approved, or additional pricing pressures.

There has also been heightened governmental scrutiny over the manner in which manufacturers set prices for, and promote, their marketed products, which has resulted in several recent Congressional inquiries, proposed bills and new regulations designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for pharmaceutical products. For example, the U.S. Department of Health and Human Services Office of Inspector General, or the OIG, issued amended anti-kickback “safe harbor” regulations, currently delayed until 2023, which may affect the manner in which manufacturers on the one hand and third-party payors and their agents on the other may enter into rebate agreements with respect to product coverage. Furthermore, in 2020, while the OIG issued new safe harbors protecting remuneration furnished to third parties under “value-based” arrangements and CMS adopted regulations governing the treatment of value-based pricing arrangements under the Medicaid rebate program, the safe harbor regulations exclude manufacturers from protection and may affect the manner in which future products are priced and contracted. Additional proposed legislation has included terms that would remove the current 100% “cap” on Medicaid rebate liability with respect to a product, which may constrain manufacturers’ ability to increase prices in the future. It is unclear what type of impact, if any, regulations such as this will have on our business in the future.

Individual states in the United States have also become increasingly active in enacting legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or

patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. We cannot predict what healthcare reform initiatives may be adopted in the future. Additional federal, state, and foreign legislative and regulatory developments are likely and we expect ongoing initiatives to increase pressure on drug pricing. Such reforms could have an adverse effect on anticipated revenues from product candidates and may affect our overall financial condition and ability to develop product candidates.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act, and the Toxic Substances Control Act, all affect our business. These and other laws govern our use, handling, and disposal of various biological, chemical, and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines.

Facilities

Our corporate headquarters are located in Berkeley, California, where we lease approximately 61,735 square feet of research and development, laboratory, and office space pursuant to a lease agreement executed in March 2021 and expiring in March 2031. We have the ability to extend this lease for an additional five years until March 2036. We believe that our existing facilities are adequate for our near-term needs, and that suitable additional facilities will be available in the future if and when needed.

Employee and Human Capital Resources

As of May 31, 2021, we had 67 employees, all but one of whom are full-time employees. Of these employees, 53 are primarily engaged in research and development activities and 26 of our research and development personnel have one or more advanced degrees. None of our employees is represented by a labor union or party to a collective bargaining agreement. We consider our relationship with our employees to be good.

We recognize that attracting, motivating, and retaining talent at all levels is vital to our continued success. Our employees are a significant asset and we aim to create an equitable, inclusive and empowering environment in which our employees can grow and advance their careers, with the overall goal of developing, expanding, and retaining our workforce to support our current pipeline and future business goals. By focusing on employee retention and engagement, we also improve our ability to support our clinical trials, our pipeline, our platform technologies, and our business and operations, while protecting the long-term interests of our stockholders. Our success depends on our ability to attract, engage, and retain a diverse group of employees. We value innovation, passion, data-driven decision making, persistence, and honesty, and we are building an inclusive environment where our employees can thrive and be inspired to make exceptional contributions to bring therapies to patients.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, motivating, and integrating our existing and future employees. The principal purposes of our equity incentive plans are to attract, retain, and motivate employees through grants of stock-based compensation awards and payments of cash-based performance bonus awards, which motivate our employees to perform to the best of their abilities and achieve our objectives. We are committed to providing a competitive and comprehensive benefits package to our employees. Our benefits package provides a balance of overall protection along with the flexibility to meet the individual health and wellness needs of our employees. We plan to continue to refine our efforts related to optimizing our use of human capital as we grow, including improvements in the way we hire, develop, motivate, and retain employees.

Corporate Social Responsibility

Diversity, Equity, and Inclusion

We are committed to cultivating, fostering, and preserving a culture of diversity, equity, and inclusion, or DEI. We foster an inclusive environment through respect, collaboration, and candid communication. We embrace and encourage differences in age, color, disability, ethnicity, family or marital status, gender identity or expression, language, national origin, culture or customs, physical and mental ability, political affiliation, race, religion, sexual orientation, socio-economic status, veteran status, and other characteristics that make our employees unique. We embrace differences in experience and background, and we welcome a diversity of opinions when making decisions. We would not be who we are today without the diversity of our team.

As of May 31, 2021, 55% of our employees were self-reportedly women. Of our director-level and above employees, 59% were self-reportedly women and 29% of this group self-reported other than white. The ratio of men to women is fairly balanced at each level of our organization except for our research staff where there are more women than men. In addition, as of May 31, 2021, 40% of all our employees were self-reportedly ethnic or racial minorities, with 21% self-identifying as Asian, 6% Black or African American, 6% Hispanic or Latinx, and 7% of other minority groups or two or more races. Our employees span multiple age brackets and bring their unique perspectives and experiences to our organization. As of May 31, 2021, the average age of our employees is 41.5 years old and 51% of our workforce is under 40 years of age. Although we are proud of our efforts and metrics to date, we recognize that there is still more work to be done until the diversity of our workforce matches the diversity of the Bay Area.

To champion our efforts in this area, we recently formed an Inclusion Committee comprised of employees from various departments, backgrounds, and levels within our organization. The Inclusion Committee sets forth our commitment to the importance of DEI and the responsibility of our employees to treat others with dignity and respect at all times. All employees are provided diversity awareness training and unconscious bias training to enhance their knowledge to fulfill this responsibility, in addition to mandatory sexual harassment training. The Inclusion Committee works to identify gaps, respond to feedback provided by peers and present suggestions on our hiring and retention practices and policies to encourage and enforce an environment in which all employees feel included and empowered to achieve their best. Management has committed time and resources for this ongoing initiative.

Participation in Our Community

Our headquarters are located in Berkeley, California, and many of our employees are alumni of local universities and some have grown up in the San Francisco Bay Area and attended local schools. Our employees are talented and passionate people who are committed to making a difference in our community and beyond. As a company, we actively participate in outreach efforts to increase opportunities for underrepresented groups, including hosting and providing volunteers for science, technology, engineering, and mathematics, or STEM, programs at local elementary, junior high and high schools as well as community colleges and universities. Many of our employees speak at local schools about careers in biotechnology and we have hosted students at our facility to engage them in aspects of biotechnology to which they may not have been previously exposed. We look for opportunities to foster the growth of future scientists and a love of science.

We provide each of our employees with eight hours of paid volunteer time each year, which can be used for participating in school activities, voter registrations, environmental activities, and the like.

The Herd at Caribou

We at Caribou refer to ourselves as “the herd.” We encourage and value social interactions among the herd. To this end, until the COVID-19 pandemic, we met for quarterly events, including a company-organized

San Francisco Bay shoreline clean-up effort. During the COVID-19 pandemic, we have continued quarterly events virtually, such as chocolate tastings. We also sponsor a monthly “fun run” for employees to either run or walk to the shoreline or in the Berkeley hills. For several years, we have offered yoga for our employees, and we have continued this virtually.

We are environmentally conscious. With this in mind, we strive to mitigate our impact on the environment where possible and pursue innovative ways to grow our business while minimizing our environmental footprint. The City of Berkeley requires companies with 10 or more employees to have a commuter benefits program in place and we offer pre-tax commuter benefits to ride public transportation, which is connected to our facility through various free shuttle services. Additionally, we provide bicycle vouchers to employees who bike to work and have bike repair tools on site as well as bike storage areas. There are six electric vehicle charging stations in the parking lot adjacent to our facility. Our facility is equipped with water stations that filter water to discourage the use of plastic bottles. All refuse generated at our company is sorted among recycle, compost, and landfill. We have already moved to electronic documentation and files in many functions and are in the process of completing our transition to a mostly paperless workplace.

Legal Proceedings

From time to time, we may be subject to various legal proceedings and claims that arise in the ordinary course of our business activities. Regardless of the outcome, litigation can have a material adverse effect on us because of defense and settlement costs, diversion of management resources, and other factors. Except as described below, we are not currently a party to any legal proceeding, the outcome of which, we believe, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, cash flows or financial condition.

Intellia Arbitration

On October 16, 2018, Intellia initiated an arbitration proceeding, or the Intellia Arbitration, with JAMS asserting that we had violated the terms and conditions of the License Agreement, by and between Caribou and Intellia, dated July 16, 2014, as amended. The Intellia Arbitration involves whether two patent families relating, respectively, to CRISPR-Cas9 chRDNA guides and Cas9 scaffolds, are included in the Intellia Agreement. On September 19, 2019, we received an interim award from the arbitration panel determining that the two patent families are included in the Intellia Agreement, but the panel granted us an exclusive leaseback to Cas9 chRDNA guides under economic terms to be negotiated by the parties. On February 6, 2020, the arbitration panel clarified that the leaseback relates solely to our allogeneic anti-CD19 CAR-T cell program, CB-010, and instructed the parties to negotiate economic terms based on a leaseback of that scope. On June 16, 2021, we entered into the Leaseback Agreement with Intellia, which resolved the dispute, and the parties and the arbitration panel are in the process of concluding the arbitration.

MANAGEMENT

Executive Officers and Directors

Our executive officers and directors, and their ages and positions as of June 30, 2021, are as set forth below:

Name	Age	Position(s)
Executive Officers		
Rachel E. Haurwitz, Ph.D.	36	President and Chief Executive Officer, Director
Steven B. Kanner, Ph.D.	62	Chief Scientific Officer
Barbara G. McClung, J.D.	66	Chief Legal Officer and Corporate Secretary
Jason V. O'Byrne, M.B.A.	53	Chief Financial Officer
Non-Employee Directors		
Scott Braunstein, M.D.	57	Director
Andrew Guggenhime, M.B.A.	52	Director
Jeffrey Long-McGie, M.B.A.(1)	45	Director
Natalie R. Sacks, M.D.	56	Director

(1) Mr. Long-McGie intends to resign from our board of directors in connection with the closing of this offering. Mr. Long-McGie's decision to resign as a director was not the result of any disagreement with us on any matter relating to our operations, policies, or practices.

Executive Officers

Rachel E. Haurwitz, Ph.D. is a co-founder of Caribou and has served as our President and Chief Executive Officer and a director of our company since its inception in October 2011. Dr. Haurwitz is an inventor on patents and patent applications covering multiple CRISPR-based technologies and has co-authored several scientific papers characterizing CRISPR-Cas systems including in *Science*. Dr. Haurwitz currently serves on the board of directors of the Biotechnology Industry Organization, a not-for-profit organization. Dr. Haurwitz previously served on the board of directors of Intellia, of which she is a co-founder, from July 2014 to November 2016. She received her A.B. degree in Biological Sciences from Harvard College. Dr. Haurwitz received her Ph.D. in Molecular and Cell Biology from the University of California, Berkeley, where she completed her thesis research in the laboratory of Dr. Jennifer A. Doudna. We believe that Dr. Haurwitz is qualified to serve as a director based on her operational and historical expertise and experience with Caribou gained from her role as co-founder, President and Chief Executive Officer, and member of our board of directors combined with her knowledge of CRISPR science.

Steven B. Kanner, Ph.D. has served as our Chief Scientific Officer since June 2017. Before joining Caribou, Dr. Kanner served as Vice President, Head of Biology at Arrowhead Pharmaceuticals, Inc., from September 2013 to June 2017, leading a department in discovery of RNAi therapeutics for oncology, genetic diseases, and other indications. Prior to joining Arrowhead, he served in various positions of increasing responsibility in both oncology and inflammation drug discovery at Bristol-Myers Squibb, from July 1990 to May 2003, Agensys Corporation (which was acquired by Astellas Pharma Inc. in 2007), from May 2003 to June 2010, and Astex Pharmaceuticals, Inc., from December 2010 to July 2012. Dr. Kanner has authored over 85 publications in both peer-reviewed journals and books and is an inventor on numerous U.S. and foreign patents and patent applications. He received his B.S. degree in Genetics from the University of California, Berkeley, and his Ph.D. in Immunology and Microbiology from the University of Miami's Miller School of Medicine. He was awarded an NIH post-doctoral fellowship that he completed at the University of Virginia.

Barbara G. McClung, J.D. has served as our Chief Legal Officer and Corporate Secretary since April 2015. Additionally, Ms. McClung currently teaches biotechnology law at the University of California, Berkeley, School of Law. Prior to joining Caribou, she was Vice President, General Counsel, and Corporate Secretary of Intarcia Therapeutics, Inc., from January 2007 to May 2013. Ms. McClung was Chief Legal Officer and Corporate Secretary at Cygnus, Inc., from January 1998 to December 2005. Ms. McClung began her career as a patent attorney with E. I. du Pont de Nemours and Company from May 1987 to May 1989, and then was an associate at

Townsend & Townsend from June 1989 to August 1990. Ms. McClung was Corporate Patent Counsel – Vaccines Division at Chiron Corporation from August 1990 to January 1998. Ms. McClung is a registered patent attorney before the United States Patent and Trademark Office. She received her B.A. from the University of California, San Diego, her M.A. from the University of Pennsylvania, and her J.D. from the University of Pennsylvania Law School, and is a member of the California, Delaware, and Pennsylvania state bars.

Jason V. O'Byrne, M.B.A. has served as our Chief Financial Officer since February 2021. Prior to joining Caribou, he was Senior Vice President of Finance at Audentes Therapeutics, Inc., from April 2020 to February 2021, where he led finance for the gene therapy company. From April 2019 to April 2020, Mr. O'Byrne served as Vice President of Finance at Audentes. Before joining Audentes, he spent 13 years with Genentech, Inc., a member of the Roche Group, from February 2005 to December 2018, holding finance leadership and executive positions across the research, development, manufacturing, business development and commercial functions. Earlier in his career, Mr. O'Byrne served as regional controller with General Chemical Corporation, from September 2002 to January 2005, and as an engineer with General Motors, from September 1999 to September 2001. He received a B.A.Sc. in Mechanical Engineering from the University of British Columbia, and an M.B.A. from New York University's Stern School of Business.

Non-Employee Directors

Scott Braunstein, M.D. has served on our board of directors since June 2021. Dr. Braunstein currently serves as President and Chief Executive Officer and a member of the board of directors of Marinus Pharmaceuticals, positions he has held since August 2019 and September 2018, respectively. He has served as an operating partner at Aisling Capital since August 2015. From July 2015 to March 2018, Dr. Braunstein served as Chief Strategy Officer and Chief Operating Officer at Pacira Pharmaceuticals, Inc. Prior to Pacira, Dr. Braunstein served as a healthcare portfolio manager at Everpoint Asset Management from September 2014 to February 2015 and spent 12 years from February 2002 to June 2014 with J.P. Morgan Asset Management as a healthcare analyst and managing director on the U.S. equity team and as portfolio manager of the J.P. Morgan Global Healthcare Fund. Dr. Braunstein has also served on the boards of directors of Trevena, Inc. since September 2018 and Constellation Pharmaceuticals since February 2019. He previously served as a board member of Ziopharm Oncology, Inc. from September 2018 to November 2020, Esperion Therapeutics, Inc. from June 2015 to April 2020, and Protara Therapeutics, Inc. from May 2018 to July 2020. Dr. Braunstein began his career as a physician at the Summit Medical Group and as assistant clinical professor at Albert Einstein College of Medicine and Columbia University Medical Center. He received his medical degree from the Albert Einstein College of Medicine and his B.S. from Cornell University. We believe that Dr. Braunstein is qualified to serve on our board of directors based on his expertise and experience in governing, leading, and investing in biopharmaceutical companies.

Andrew Guggenhime, M.B.A. has served on our board of directors since April 2021. Mr. Guggenhime currently serves as the President and Chief Financial Officer at Vaxcyte, Inc., positions he has held since December and May 2020, respectively. Prior to joining Vaxcyte, he served as Chief Financial Officer of Dermira, Inc. from April 2014 through the acquisition of the company by Eli Lilly and Company in February 2020. Prior to Dermira, Mr. Guggenhime served as Chief Financial Officer for CardioDx, Inc. from September 2011 to April 2014 and as a director of the company from April 2014 to July 2016. He also served as Chief Financial Officer for Calistoga Pharmaceuticals, Inc., from September 2010 to April 2011, which was acquired by Gilead Sciences, Inc. in 2011, and as Chief Financial Officer for Facet Biotech Corporation, from December 2008 to June 2010, which was acquired by Abbott Laboratories in April 2010. Mr. Guggenhime previously served as Chief Financial Officer of PDL BioPharma, Inc., until Facet Biotech was spun off from PDL BioPharma in December 2008. Prior to joining Facet Biotech, he served as Chief Financial Officer for Neoforma, Inc., which was acquired by Global Healthcare Exchange, LLC in March 2006. Mr. Guggenhime began his career in financial services at Merrill Lynch & Co. and Wells Fargo & Company. He received his B.A. in international politics and economics from Middlebury College and his M.B.A. from the J.L. Kellogg Graduate School of Management at Northwestern University. We believe that Mr. Guggenhime is qualified to serve on our board of directors based on his more than two decades of finance, strategic, and operational leadership experience at both private and public healthcare companies.

Jeffrey Long-McGie, M.B.A. has served on our board of directors since March 2021. Mr. Long-McGie has been a Managing Director at Ridgeback Capital Investments LP since January 2021. Previously, he served as a Portfolio Manager at JLM Healthcare Advisors, from July 2011 to December 2020, Senior Vice President at Ridgeback Capital Management, from January 2008 to July 2011, Analyst at Ridgeback Capital Management, from April 2006 to January 2008, Analyst at Sigma Capital, from December 2005 to April 2006, Vice President of Business Development at Andrx Corp., from April 2005 to November 2005, Vice President/Specialty Pharmaceutical Analyst at ThinkEquity Partners, from December 2003 to April 2005, Associate Analyst/Pharmaceuticals, A.G. Edwards & Sons, from September 2000 to December 2003, and Intern, Equity Research/Pharmaceuticals, A.G. Edwards & Sons, from May 2000 to August 2000. Mr. Long-McGie started his career in the biotechnology industry with research positions at Onyx Pharmaceuticals Inc., from January 1998 to June 1998, and Genencor International, Inc., from May 1997 to August 1997. He received his B.S. in Microbiology from California State University, Chico, his M.A. in Biology & Biomedical Sciences from Washington University in St. Louis, and his M.B.A. from Saint Louis University. We believe that Mr. Long-McGie is qualified to serve on our board of directors based on his extensive pharmaceutical- and biotechnology-focused investment-related experience.

Natalie R. Sacks, M.D. has served on our board of directors since May 2018. Dr. Sacks is an oncologist and experienced drug developer. She currently is the Chief Medical Officer at Harpoon Therapeutics, Inc. Prior to joining Harpoon, Dr. Sacks held various development leadership roles at multiple companies including Onyx Pharmaceuticals Inc. (acquired by Amgen Inc. in 2013), from April 2011 to February 2014, Aduro, Inc., from September 2016 to September 2018, Exelixis, Inc., from September 2009 to March 2011, and Cell Genesys, Inc., from November 2002 to April 2009. She has been responsible for all aspects of development including the late-stage development of oncology therapeutics Kyprolis from Onyx Pharmaceuticals Inc. and Cometriq from Exelixis, Inc. Dr. Sacks also currently serves on the board of directors of Zymeworks, Inc. and STipe Therapeutics. Dr. Sacks held a faculty appointment at the University of California, San Francisco from October 2004 to October 2016, where she was a volunteer assistant clinical professor of medicine in the Division of Hematology/Oncology. She received her B.A. in Mathematics from Bryn Mawr College, her M.S. Biostatistics from Harvard University School of Public Health, and her M.D. from the University of Pennsylvania School of Medicine. We believe that Dr. Sacks is qualified to serve on our board of directors based on her extensive experience developing late-stage oncology therapeutics and her experience serving as a director of a public company and in executive leadership roles at multiple companies.

Scientific Advisory Board

Our management team is actively advised by our eight-member Scientific Advisory Board, or SAB, which includes our co-founders Drs. Jennifer A. Doudna and Martin Jinek. We have assembled a team of advisors with know-how in complementary disciplines necessary for the development of our technologies and therapeutic product capabilities. Our SAB includes world experts in immuno-oncology therapeutics, T cell metabolism and tumor interactions, iPSC biology and differentiation, clinical trial development, and patient care. Our SAB regularly meets with the senior members of our research and development teams to provide insight and advice on our research and development efforts. In addition, we regularly consult with individual members of our SAB on matters pertaining to their respective areas of expertise. We believe that our advisory board's expertise is a valuable asset for our discovery and development of novel therapeutic candidates.

Jennifer A. Doudna, Ph.D. is one of our co-founders. She is a professor of Molecular and Cell Biology and Chemistry at the University of California, Berkeley where she is the Li Ka Shing Chancellor's Chair in Biomedical and Health Sciences; the President of the Innovative Genomics Institute; an Investigator at the Howard Hughes Medical Institute; a Senior Investigator at the Gladstone Institutes; a Faculty Scientist in the Physical Biosciences Division of Lawrence Berkeley National Laboratory; and a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Her research seeks to understand how non-coding RNA molecules control the expression of genetic information and she has published extensively in the field of CRISPR-Cas biology. Dr. Doudna's work and that of her collaborator Emmanuelle Charpentier was recognized by the award of the Nobel Prize in Chemistry in 2020 as well as a 2015 Breakthrough Prize. Her work on CRISPR-Cas systems has also been recognized with the Paul Janssen Award for Biomedical Research, a Lurie

Prize in Biomedical Sciences, and the Princess of Asturias award. Dr. Doudna was also named to the 2015 TIME Magazine's TIME 100 list of the 100 most influential people in the world. After serving as a member of the Yale University faculty for eight years, during which time she was promoted to Henry Ford II Professor of Molecular Biophysics and Biochemistry, she joined the UC Berkeley faculty in 2002. Dr. Doudna received a B.A. in Biochemistry from Pomona College and a Ph.D. in Biochemistry from Harvard University.

Martin Jinek, Ph.D. is one of our co-founders and an Assistant Professor at the University of Zurich in the Department of Biochemistry. His research focuses on molecular mechanisms that orchestrate cellular regulation through protein-RNA interactions. His studies include biochemical and structural approaches to investigate these processes at the atomic level. Dr. Jinek has contributed significantly to the field of CRISPR biology both through basic discovery and through the invention of new CRISPR-based technologies. He has won both the Human Frontier Science Program Fellowship and the EMBO Long-term Fellowship. Dr. Jinek received a B.A. in Natural Sciences, an M.S. in Chemistry from the University of Cambridge, as well as a Ph.D. in Structural Biology from the University of Heidelberg.

Ami Bhatt, M.D., Ph.D. is an Assistant Professor of Medicine (Hematology) and of Genetics at Stanford University where her research focuses on inspecting, characterizing, and dissecting the microbe-human interface. Dr. Bhatt is also the Director of Global Oncology at the Center for Innovation in Global Health at Stanford and the co-founder of the non-profit organization Global Oncology with the goal of improving cancer outcomes for patients in impoverished settings. Dr. Bhatt received her M.D. in Medicine and Ph.D. in Biochemistry and Molecular Biology from the University of California, San Francisco and completed residency and chief residency in Internal Medicine at Brigham and Women's Hospital. Dr. Bhatt completed her post-doctoral fellowship at the Broad Institute of Harvard and Massachusetts Institute of Technology and completed her hematology/oncology fellowship at the Dana-Farber Cancer Institute.

Jeffrey Rathmell, Ph.D. is a Director of the Vanderbilt Center for Immunobiology and serves as the Associate Director of the Institute of Infection, Immunology and Inflammation at the Vanderbilt University Medical Center where he is also the co-leader of the Molecular Pathology and Immunology Ph.D. training program. His studies focus on manipulating mechanisms to control inflammatory diseases and anti-tumor immune responses and to understand how metabolism is intimately linked to nearly all aspects of cell function. Prior to joining the Vanderbilt University Medical Center, Dr. Rathmell was a member of the Duke Molecular Physiology Institute and was involved with the departments of Pharmacology, Cancer Biology, and Immunology. He received a Ph.D. in Immunology on B cell tolerance and death mechanisms at Stanford University. Dr. Rathmell completed postdoctoral studies at the University of Chicago and the University of Pennsylvania.

Noopur Raje, M.D. is a Professor of Medicine at Harvard Medical School, the director of the Center for Multiple Myeloma, and the Rita Kelley Chair in Oncology at the Massachusetts General Hospital Cancer Center. She is a physician scientist with a primary focus on multiple myeloma and related plasma cell disorders. Dr. Raje has focused on developing new promising therapies for multiple myeloma. Her laboratory efforts are aimed at identifying cellular signaling pathways that contribute to the survival and proliferation of myeloma cells in the bone environment and designing trials to specifically harness these. She is the co-chair of the National Cancer Institute steering committee for multiple myeloma and a board member of the International Myeloma Society. Dr. Raje received her M.D. from B.J. Medical College at Pune University. She trained in internal medicine at Massachusetts General Hospital and completed a fellowship in hematology and medical oncology at the Dana-Farber Cancer Institute.

Katy Rezvani, M.D, Ph.D. is the Sally Cooper Murray Chair in Cancer Research, Professor of Medicine, Chief of Section for Cellular Therapy, Director of Translational Research, and Director of the GMP Facility at MD Anderson Cancer Center. She also serves as Executive Director of MD Anderson's Adoptive Cell Therapy Platform. Her research laboratory focuses on the role of NK cells in mediating immunity against hematologic and solid tumors. The goal of this research is to understand mechanisms of tumor-induced NK cell dysfunction and to develop strategies to genetically engineer NK cells to enhance their *in vivo* anti-tumor activity and persistence. Findings from Dr. Rezvani's lab have led to the approval and funding of several investigator-initiated clinical

trials of NK cell immunotherapy in patients with hematologic malignancies and solid tumors, as well as the first-in-human clinical trial of off-the-shelf CAR-transduced cord blood NK cells in patients with relapsed/refractory lymphoid malignancies. Dr. Rezvani completed her medical training at University College London, followed by Fellowships of the Royal College of Physicians and the Royal College of Pathologists of the United Kingdom, a Ph.D. in Immunology from Imperial College London, and postdoctoral studies at the National Institutes of Health.

Christopher Sturgeon, Ph.D. is an Associate Professor at the Icahn School of Medicine at Mount Sinai. His studies focus on characterizing the signal pathways that control human pluripotent stem cell differentiation towards hematopoietic stem/progenitors and how this impacts NK cell development and function. Prior to joining Mount Sinai, Dr. Sturgeon was a member of the Washington University School of Medicine Hematology Division. He received a Ph.D. in Biochemistry on cell cycle regulation at the University of British Columbia. Dr. Sturgeon completed postdoctoral studies at the McEwen Centre for Regenerative Medicine at the University of Toronto where he studied pluripotent stem cell-derived hematopoiesis.

Cameron Turtle, M.B.B.S., Ph.D. is an Associate Member at the Fred Hutchinson Cancer Research Center, or FHCRC, and an Associate Professor at the University of Washington, or UW. He serves as an attending physician on the Hematopoietic Cell Transplant, or HCT, Service and the Immunotherapy Service at FHCRC, Seattle Cancer Care Alliance, and the UW Medical Center. His research laboratory in the Clinical Research Division at FHCRC is focused on understanding the characteristics of distinct subsets of human CD8+ T cells, their potential utility for tumor immunotherapy, and their role in immune reconstitution after HCT. Dr. Turtle is Principal Investigator and IND sponsor of several investigator-initiated clinical trials of CD19-targeted CAR-modified T cell therapy for patients with B cell malignancies. He completed medical training at the University of Sydney, Australia, followed by Fellowships of the Royal Australasian College of Physicians and the Royal College of Pathologists of Australasia and a Ph.D. in Immunology.

Board Composition and Election of Directors

Our board of directors currently consists of five members. As discussed below, certain of our directors were appointed pursuant to a voting agreement that we have entered into with the holders of our convertible preferred stock and certain holders of our common stock, as described below. The voting agreement will terminate upon the closing of this offering and there will be no further contractual obligations regarding the election of any of our directors. Each director is currently elected to the board of directors to hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

There are no family relationships among any of our directors and executive officers.

Voting Arrangements

The election of the members of our board of directors is currently governed by the amended and restated voting agreement that we entered into with certain holders of our common stock and convertible preferred stock and the related provisions of our amended and restated certificate of incorporation. Pursuant to our amended and restated voting agreement effective in March 2021 and amended and restated certificate of incorporation, our current directors were elected or appointed as follows:

- Mr. Long-McGie was appointed as the designee of Ridgeback Capital Investment L.P., an investor in our Series C convertible preferred stock financing;
- Dr. Haurwitz was elected and designated as our then-serving and current Chief Executive Officer;
- Dr. Sacks was elected by a majority of our common stockholders and currently serves as an independent director;

- Dr. Braunstein was elected by a majority of our common stockholders and preferred stockholders, voting together as a single class, and he currently serves as an independent director;

- Mr. Guggenhime was elected by a majority of our common stockholders and preferred stockholders, voting together as a single class, and he currently serves as an independent director;

- One board seat is vacant and reserved for the majority in interest of our Series A, Series A-1, and Series B convertible stockholders, voting together as a single class, on an as-converted basis, who shall be designated by management and approved by a majority of the other directors; and

- One board seat is vacant and reserved for a board designee of PFM Health Sciences, LP and its affiliate funds, investors in our Series C convertible preferred stock financing.

Our amended and restated voting agreement will terminate and the provisions of our current amended and restated certificate of incorporate by which our directors were elected will be amended and restated in connection with this offering. After this offering, the number of directors will be fixed by our board of directors, subject to the terms of our amended and restated certificate of incorporation and our amended and restated bylaws that will become effective immediately prior to the completion of this offering. Each of our directors is currently elected to the board of directors and will continue to serve as a director until the election and qualification of their successor, or until their earlier death, resignation, or removal.

Classified Board of Directors

In accordance with our amended and restated certificate of incorporation, which will be in effect upon the closing of this offering, our board of directors will be divided into three classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the class whose terms are then expiring, to serve from the time of election and qualification until the third annual meeting following their election or until their earlier death, resignation, or removal. Upon the closing of this offering, our directors will be divided among the three classes as follows:

The Class I directors will be and , and their terms will expire at our 2022 annual meeting of stockholders following this offering.

The Class II directors will be and , and their terms will expire at our 2023 annual meeting of stockholders following this offering.

The Class III directors will be and , and their terms will expire at our 2024 annual meeting of stockholders following this offering.

Our amended and restated certificate of incorporation will provide that the authorized number of directors may be changed only by resolution of our board of directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

See the section of this prospectus captioned “Description of Capital Stock—Anti-takeover Effects of Our Certificate of Incorporation and Our Bylaws” for a discussion of these and other anti-takeover provisions found in our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to the closing of this offering.

Director Independence

Under the rules of the Nasdaq Stock Market, independent directors must comprise a majority of a listed company’s board of directors within one year of the completion of its initial public offering. In addition, the rules

of the Nasdaq Stock Market require that, subject to specified exceptions, each member of a listed company's audit and compensation committees be independent and that director nominees be selected or recommended for the board's selection by independent directors constituting a majority of the independent directors or by a nominating and corporate governance committee comprised solely of independent directors. Under the rules of the Nasdaq Stock Market, a director will only qualify as "independent" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that such person is "independent" as defined under Nasdaq Stock Market and the Exchange Act rules.

Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in their capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or (2) be an affiliated person of the listed company or any of its subsidiaries.

Based upon information requested from and provided by each director concerning their background, employment, and affiliations, including family relationships, our board of directors has determined that each of our directors, with the exception of Dr. Haurwitz, is an "independent director" as defined under applicable rules of the Nasdaq Stock Market, including, in the case of Dr. Braunstein, Mr. Guggenhime, Mr. Long-McGie, and Dr. Sacks, the independence criteria set forth in Rule 10A-3 under the Exchange Act. Each of the members of our compensation committee are also "non-employee directors" as defined in Section 16b-3 of the Exchange Act. In making such determination, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director. Dr. Haurwitz is not an independent director under these rules because she is our President and Chief Executive Officer.

Board Committees

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee, each of which will operate pursuant to a charter adopted by our board of directors and which will be effective prior to the consummation of this offering. The board of directors may also establish other committees from time to time to assist us and the board of directors in their duties. Upon the effectiveness of the registration statement of which this prospectus forms a part, the composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act, the Nasdaq Stock Market, and the Exchange Act. Upon our listing on the Nasdaq Global Select Market, each committee charter will be available on the corporate governance section of our website, *www.cariboubio.com*. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase shares of our common stock.

Audit Committee

The audit committee's responsibilities upon completion of this offering will include:

- appointing, approving the compensation of, and evaluating the qualifications, performance, and independence of our independent registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from such firm, and pre-approving all audit and permitted non-audit services to be performed by our independent registered public accounting firm;

- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements;
- reviewing and discussing with management and our independent registered public accounting firm any material issues regarding accounting principles and financial statement presentations;
- coordinating our board of directors' oversight of our internal control over financial reporting, disclosure controls and procedures, code of business conduct and ethics, procedures for complaints, and legal and regulatory matters;
- discussing our risk management policies with management;
- establishing policies regarding hiring employees from our independent registered public accounting firm and procedures for the receipt and retention of accounting-related complaints and concerns;
- meeting independently with our independent registered public accounting firm and management;
- reviewing and approving any related person transactions;
- overseeing our guidelines and policies governing risk assessment and risk management;
- preparing the audit committee report required by SEC rules;
- reviewing and assessing, at least annually, the adequacy of the audit committee's charter; and
- performing, at least annually, an evaluation of the performance of the audit committee.

All audit services and all non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

The members of our audit committee will be Mr. Guggenhime, , and . Mr. Guggenhime will chair the audit committee. Our board of directors has also determined that Mr. Guggenhime qualifies as an "audit committee financial expert," as defined under Item 407 of Regulation S-K.

We expect to satisfy the member independence requirements for the audit committee prior to the end of the transition period provided under current Nasdaq Listing Rules and SEC rules and regulations for companies completing their initial public offering.

Compensation Committee

Our compensation committee's responsibilities upon completion of this offering will include:

- reviewing our overall compensation strategy, including base salary, incentive compensation, and equity-based grants;
- reviewing and making recommendations to our board of directors for approval of corporate goals and objectives relevant to the compensation of our chief executive officer and our other executive officers;
- recommending to our board of directors the compensation of our chief executive officer and other executive officers;

- reviewing and making recommendations to our board of directors with respect to director compensation;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board of directors regarding any employment contract and other compensation, severance, and change-in-control arrangements for our executive officers;
- recommending to our board of directors any stock ownership guidelines for our executive officers and non-employee directors;
- retaining, appointing, or obtaining advice of a compensation consultant, legal counsel, or other advisor, and determining the compensation and independence of such consultant or advisor;
- preparing, if required, the compensation committee report on executive compensation for inclusion in our annual proxy statement in accordance with the proxy rules;
- reviewing and assessing, at least annually, the adequacy of the compensation committee's charter; and
- performing, on an annual basis, an evaluation of the performance of the compensation committee.

The members of our compensation committee will be , , and . will chair the compensation committee. Prior to establishing a compensation committee, our board of directors has made all decisions relating to the compensation of our executive officers.

We expect to satisfy the member independence requirements for the compensation committee prior to the end of the transition period provided under current Nasdaq Listing Rules and SEC rules and regulations for companies completing their initial public offering.

Nominating and Governance Committee

Our nominating and corporate governance committee's responsibilities upon completion of this offering will include:

- identifying individuals qualified to become members of our board of directors consistent with criteria approved by the board and receiving nominations for such qualified individuals;
- recommending to our board of directors the persons to be nominated for election as directors and to each committee of the board;
- reviewing and recommending committee membership and chairs on an annual basis;
- recommending to our board of directors qualified candidates to fill vacancies on our board of directors;
- developing and recommending to our board of directors appropriate corporate governance policies and procedures and reviewing such policies and procedures, as needed;
- reviewing and making recommendations to our board with respect to our board leadership structure;

- developing a process for the annual evaluation of our board of directors and its committees and overseeing the conduct of this annual evaluation;
- reviewing and assessing, at least annually, the adequacy of the nominating and corporate governance committee's charter; and
- performing, on an annual basis, an evaluation of the performance of the nominating and corporate governance committee.

The members of our nominating and corporate governance committee will be , and . will chair the nominating and corporate governance committee.

We expect to satisfy the member independence requirements for the nominating and governance committee prior to the end of the transition period provided under current Nasdaq Listing Rules and SEC rules and regulations for companies completing their initial public offering.

Leadership Structure of the Board

Our amended and restated bylaws and corporate governance guidelines provide our board of directors with flexibility to combine or separate the positions of chair of the board of directors and Chief Executive Officer.

We currently do not have a chair of the board of directors. Our board of directors has concluded that our current leadership structure is appropriate at this time.

Role of the Board of Directors in Risk Oversight Process

Our board of directors has an active role, as a whole and also at the committee level, in overseeing the management of our risks. Our board of directors, as a whole, is responsible for general oversight of risks and regular review of information regarding our risks, including credit risks, liquidity risks, and operational risks. In addition, our audit committee is expected to review and discuss with our management the risks faced by our company and the policies, guidelines, and processes by which management assesses and manages our company's risks, including major financial risk exposures and cybersecurity risk exposures, and the steps our management has taken to monitor and control such exposures.

Code of Business Conduct and Ethics

We intend to adopt a written code of business conduct and ethics, or Code of Conduct, that will apply to our directors, executive officers, and employees. Following this offering, a current copy of the Code of Conduct will be available on the Corporate Governance section of our website, *www.cariboubio.com*. The audit committee of our board of directors will be responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements with respect to our executive officers and directors, will be disclosed on our website. Our website and the information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part. We have included our website address as an inactive textual reference only.

Limitation of Directors' and Officers' Liability and Indemnification

The Delaware General Corporation Law authorizes corporations to limit or eliminate, subject to specified conditions, the personal liability of directors to corporations and their stockholders for monetary

damages for breach of their fiduciary duties. Our amended and restated certificate of incorporation, which will be effective upon the completion of this offering, will limit the liability of our directors to the fullest extent permitted by Delaware law.

We have directors' and officers' liability insurance to cover liabilities our directors and executive officers may incur in connection with their services to us. Our amended and restated certificate of incorporation and restated bylaws, which will be effective upon the completion of this offering, will also provide that we will indemnify and advance expenses to any of our directors and executive officers who, by reason of the fact that they are one of our executive officers or directors, is involved in a legal proceeding of any nature. We will repay certain expenses incurred by a director or officer in connection with any civil, criminal, administrative, or investigative action or proceeding, including actions by us or in our name. Such indemnifiable expenses include, to the maximum extent permitted by law, attorney's fees, judgments, fines, ERISA excise taxes, penalties, settlement amounts, and other expenses reasonably incurred in connection with legal proceedings. A director or officer will not receive indemnification if they are found not to have acted in good faith and in a manner they reasonably believed to be in, or not opposed to, our best interest.

We have entered into or plan to enter into indemnification agreements with each of our directors and executive officers, the form of which is attached as an exhibit to the registration statement of which this prospectus is a part. These agreements provide that we will, among other things, indemnify and advance expenses to our directors and executive officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by any such person in any action or proceeding, including any action by us arising out of such person's services as our director or officer, or any other company or enterprise to which the person provides services at our request. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers.

Such limitation of liability and indemnification does not affect the availability of equitable remedies. In addition, we have been advised that in the opinion of the SEC, indemnification for liabilities arising under the Securities Act is against public policy as expressed in the Securities Act and is therefore unenforceable.

There is no pending litigation or proceeding involving any of our directors, executive officers, employees, or agents in which indemnification will be required or permitted. We are not aware of any threatened litigation or proceeding that may result in a claim for such indemnification.

EXECUTIVE AND DIRECTOR COMPENSATION

The following discussion and analysis of compensation arrangements should be read with the compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current plans and expectations regarding future compensation programs. Actual compensation programs that we adopt may differ materially from the programs summarized in this discussion.

Introduction

This section provides an overview of the compensation awarded to, earned by, or paid to our principal executive officer and our next two most highly compensated executive officers in respect of their service to us for the fiscal year ended December 31, 2020. We refer to these individuals as our named executive officers. Our named executive officers are:

- Rachel E. Haurwitz, Ph.D., our President and Chief Executive Officer;
- Steven B. Kanner, Ph.D., our Chief Scientific Officer; and
- Barbara G. McClung, J.D., our Chief Legal Officer and Corporate Secretary.

We have also provided an overview of our compensation arrangement with Jason V. O'Byrne, our Chief Financial Officer, who joined our company in February 2021.

Prior to this offering, our board of directors has been responsible for determining the compensation of our executive officers. Our President and Chief Executive Officer made recommendations to our board of directors regarding the compensation of the other executive officers in respect of the fiscal year ended December 31, 2020. In connection with this offering, our board of directors intends to establish a compensation committee, which will be responsible for determining the compensation of our executive officers following this offering.

Summary Compensation Table

The following table sets forth the compensation awarded to, earned by, or paid to our named executive officers in respect of their service to us for the fiscal years ended December 31, 2020 and December 31, 2019 (as applicable):

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Rachel E. Haurwitz, Ph.D.	2020	450,000	202,500(1)	—	49,384(2)	—	17,720(3)	719,604
President and Chief Executive Officer	2019	425,000	47,813	—	49,256(2)	—	18,356(3)	540,425
Steven B. Kanner, Ph.D.	2020	355,000	124,250(1)	—	140,705(2)	—	21,259(3)	641,215
Chief Scientific Officer	2019	337,500	88,594	—	99,636(2)	—	20,451(3)	546,181
Barbara G. McClung, J.D.	2020	365,000	127,750(1)	—	62,849(2)	—	21,244(3)	576,842
Chief Legal Officer and Corporate Secretary	2019	345,000	90,563	—	29,232(2)	—	20,451(3)	485,246

(1) 2020 bonus paid in February 2021.

(2) The amounts shown represent the grant date fair values of option awards granted in 2020 and 2019 as computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standard Codification (ASC) Topic 718. See Note 12, Stock-based compensation to our consolidated financial statements included elsewhere in this prospectus for a discussion of the assumptions used in the calculation of these amounts.

(3) Health, life, and disability insurance and 401(k) retirement plan contributions for which all regular full-time employees are eligible.

Narrative Disclosure to Summary Compensation Table

Base Salary

During fiscal year 2020, the base salary for each of Dr. Haurwitz, Dr. Kanner, and Ms. McClung was $450,000, $355,000, and $365,000, respectively.

During fiscal year 2019, the base salary for Dr. Haurwitz was $400,000, increased to $450,000 effective July 1, 2019; the base salary for Dr. Kanner was $320,000, increased to $355,000 effective July 1, 2019; and the base salary for Ms. McClung was $325,000, increased to $365,000 effective July 1, 2019.

Annual Bonuses

Each of Dr. Haurwitz, Dr. Kanner, and Ms. McClung was eligible to receive an annual bonus for fiscal years 2020 and 2019, with the target amount of such bonus for each named executive officer set forth in their respective salary increase letters.

For fiscal year 2020, the target bonus amounts, expressed as a percentage of base salary, for each of Dr. Haurwitz, Dr. Kanner, and Ms. McClung were as follows: 45%, 35%, and 35%, respectively. Actual bonuses for fiscal year 2020, paid in February 2021, for each of Dr. Haurwitz, Dr. Kanner, and Ms. McClung were as follows: $202,500, $124,250, and $127,750, respectively.

For fiscal year 2019, the target bonus amounts expressed as a percentage of base salary, for each of Dr. Haurwitz, Dr. Kanner, and Ms. McClung were as follows: 40%, 30%, and 30%, respectively, increased to 45%, 35%, and 35%, respectively, effective July 1, 2019. Actual bonuses for fiscal year 2019, paid in December 2019, for each of Dr. Haurwitz, Dr. Kanner, and Ms. McClung were as follows: $47,813, $88,594, and $90,563, respectively.

Equity Compensation Awards

On March 30, 2021, Dr. Haurwitz, Dr. Kanner, Ms. McClung, and Mr. O'Byrne were awarded stock options under the 2013 Equity Incentive Plan, as amended and restated to date, or the 2013 Plan, covering 240,485, 127,566, 127,566, and 240,485 shares of our common stock, respectively, at an exercise price of $7.47 per share. For each option grant, 1/4th of the shares subject to the option will vest on the one-year anniversary of the March 2, 2021 vesting commencement date in the case of Dr. Haurwitz, Dr. Kanner, and Ms. McClung, and February 8, 2021 in the case of Mr. O'Byrne, and an additional 1/48th of the aggregate number of shares subject to the option will vest on the corresponding day of each month thereafter (or if there is no such corresponding day, on the last day of such month), subject to the employee's continued service to us through the applicable vesting date. Mr. O'Byrne's stock option was a new hire grant pursuant to his offer letter.

The Company did not grant any stock option grants to Dr. Haurwitz, Dr. Kanner, or Ms. McClung in fiscal year 2020.

Dr. Haurwitz did not receive any stock option grants in 2019.

Dr. Kanner and Ms. McClung were each awarded a stock option grant covering 80,720 shares of our common stock on October 1, 2019 under the 2013 Plan with an exercise price of $4.88 per share, with 1/4th of the shares subject to the option vesting on the one-year anniversary of the October 1, 2019 vesting commencement date and an additional 1/48th of the aggregate number of shares subject to the option vesting on the corresponding day of each month thereafter (or if there is no such corresponding day, on the last day of such month), subject to the employee's continued service to us thorough the applicable vesting date.

Employment Agreements with Our Named Executive Officers and Mr. O'Byrne

We have entered into written employment agreements with each of our named executive officers and our Chief Financial Officer, which are described below. These agreements will be amended and restated in connection with this offering.

Employment Agreement with Dr. Haurwitz

On June 30, 2017, we entered into an employment agreement with Dr. Haurwitz setting forth the terms and conditions of her employment with us. The employment agreement provides for Dr. Haurwitz to serve as our President and Chief Executive Officer. Under the terms of her employment agreement, Dr. Haurwitz's initial base salary was $325,000, subject to review and adjustment by our board of directors from time to time. Dr. Haurwitz's initial target annual bonus opportunity was 35% of her annual base salary. Effective January 1, 2021, Dr. Haurwitz's annual base salary is $495,000, with a target bonus opportunity of 45% of her annual base salary. We will enter into an amended and restated employment agreement with Dr. Haurwitz, which will become effective upon the closing of this offering, that provides for a base salary of $570,000 and a target bonus opportunity of 55% of her annual base salary.

Employment Agreement with Dr. Kanner

On June 30, 2017, we entered into an employment agreement with Dr. Kanner setting forth the terms and conditions of his employment with us. The employment agreement provides for Dr. Kanner to serve as our Chief Scientific Officer. Under the terms of his employment agreement, Dr. Kanner's initial base salary was $290,000, subject to review and adjustment by our board of directors from time to time. Dr. Kanner's initial target annual bonus opportunity was 30% of his annual base salary. Effective January 1, 2021, Dr. Kanner's annual base salary is $390,000, with a target bonus opportunity of 35% of his annual base salary. We will enter into an amended and restated employment agreement with Dr. Kanner, which will become effective upon the closing of this offering, that provides for a base salary of $440,000 and a target bonus opportunity of 40% of his annual base salary.

Employment Agreement with Ms. McClung

On June 30, 2017, we entered into an employment agreement with Ms. McClung setting forth the terms and conditions of her employment with us. The employment agreement provides for Ms. McClung to serve as our Chief Legal Officer and Corporate Secretary. Under the terms of her employment agreement, Ms. McClung's initial base salary was $260,000, subject to review and adjustment by our board of directors from time to time. Ms. McClung's initial target annual bonus opportunity was 25% of her annual base salary. Effective January 1, 2021, Ms. McClung's annual base salary is $395,000, with a target bonus opportunity of 35% of her annual base salary. We will enter into an amended and restated employment agreement with Ms. McClung, which will become effective upon the closing of this offering, that provides for a base salary of $440,000 and a target bonus opportunity of 40% of her annual base salary.

Employment Agreement with Mr. O'Byrne

On February 8, 2021, we entered into an employment agreement with Mr. O'Byrne setting forth the terms and conditions of his employment with us. The employment agreement provides for Mr. O'Byrne to serve as our Chief Financial Officer commencing February 8, 2021. Under the terms of his employment agreement, Mr. O'Byrne's initial base salary is $385,000, subject to review and adjustment by our board of directors from time to time. Mr. O'Byrne's initial target bonus opportunity is 35% of his annual base salary. We will enter into an amended and restated employment agreement with Mr. O'Byrne, which will become effective upon the closing of this offering, that provides for a base salary of $415,000 and a target bonus opportunity of 40% of his annual base salary.

On March 15, 2021, we paid Mr. O'Byrne a one-time bonus of $70,000. Pursuant to Mr. O'Byrne's offer letter, this bonus was contingent on both our closing of our Series C preferred stock financing, which closed

in March 2021, and Mr. O'Byrne not receiving a bonus for 2020 from his previous employer. If, within one year from the date of the bonus payment, Mr. O'Byrne chooses to leave the Company or his employment is terminated by us for cause, then Mr. O'Byrne must repay us a prorated portion of such bonus.

Equity Incentive Plans

2013 Equity Incentive Plan

The 2013 Plan was duly adopted by our board of directors and approved by our stockholders in November 2013. The 2013 Plan was subsequently amended to increase the number of shares issuable under the plan. The 2013 Plan provides for the grant of incentive stock options, or ISOs, nonqualified stock options, or NSOs, stock appreciation rights, or SARs, restricted stock, and restricted stock units to officers, directors, employees, and consultants of the Company.

The 2013 Plan authorizes the issuance of up to 5,475,493 shares of our common stock pursuant to awards, plus up to 250,000 shares subject to stock options or other awards granted under our terminated 2012 Stock Option/Stock Issuance Plan (described below) that expire or otherwise terminate without having been exercised in full and shares of our common stock issued pursuant to awards granted under the 2012 Plan that are forfeited to or repurchased by us. As of May 31, 2021, there were outstanding stock options covering 2,838,275 shares granted under the 2013 Plan and there were 804,702 shares of our common stock remaining available for grant or issuance under the 2013 Plan.

Plan administration. Our board of directors, or a committee appointed by our board of directors, has the authority to administer the 2013 Plan and grant awards under the plan. This authority includes the authority to select the service providers to whom awards will be granted under the 2013 Plan, the number of shares to be subject to those awards, and the terms and conditions of those awards. In addition, the administrator has the authority to construe and interpret the 2013 Plan and to adopt rules for the administration, interpretation, and application of the 2013 Plan that are consistent with the terms of the 2013 Plan.

Non-transferability of awards. Shares issued pursuant to an award of restricted stock under the 2013 Plan may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the period during which the transfer of such shares are subject to restrictions and are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by our board of directors, or a committee thereof appointed by our board of directors.

Amendment and termination. Our board of directors may amend or terminate the 2013 Plan at any time, but no amendment may impair the rights of a holder of an outstanding award without the holder's consent. Any amendment of the 2013 Plan will be subject to the approval of our stockholders where such approval is required by applicable law.

2012 Stock Option/Stock Issuance Plan

The 2012 Stock Option/Stock Issuance Plan, or the 2012 Plan, was duly adopted by our board of directors and approved by our stockholders in October 2012. The 2012 Plan authorizes the issuance of 650,000 shares of our common stock pursuant to awards. As of May 31, 2021, there were outstanding stock options covering 250,000 shares granted under the 2012 Plan, covering all the shares remaining available for grant under the 2012 Plan. The period to exercise these 250,000 shares granted under the 2012 Plan expires on July 31, 2021. Effective upon the adoption of the 2013 Plan, no further awards may be issued under the 2012 Plan.

Plan administration. Our board of directors, or a committee appointed by our board of directors, has the authority to administer the 2012 Plan. This authority includes the authority to adopt rules for the administration, interpretation, and application of the 2012 Plan that are consistent with the terms of the 2012 Plan.

Transferability of awards. An ISO granted under the 2012 Plan is not assignable or transferable other than by will or by the laws of inheritance following the optionee's death. An NSO is subject to the same transfer restrictions as an ISO, except that an NSO, together with the underlying unexercised shares of common stock, may, to the extent permitted by the 2012 Plan administrator, be assigned in whole or in part during the optionee's lifetime by gift.

2021 Equity Incentive Plan

We expect that our board of directors will adopt and our stockholders will approve prior to the closing of this offering our 2021 Equity Incentive Plan, or the 2021 Plan. The 2021 Plan will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. The principal purpose of the 2021 Plan is to attract, retain, and motivate selected employees, consultants, and directors through the granting of stock-based compensation awards. The material terms of the 2021 Plan, as it is currently contemplated by our board of directors, are summarized below.

Share Reserve. Under the 2021 Plan, shares of our common stock will be initially reserved for issuance pursuant to a variety of stock-based compensation awards, including stock options, stock appreciation rights, or SARs, restricted stock awards, restricted stock unit awards, performance stock awards, performance stock unit awards, and other stock-based awards. The number of shares initially reserved for issuance or transfer pursuant to awards under the 2021 Plan will be increased by, if approved by our board of directors or the compensation committee of our board of directors, an annual increase on the first day of each fiscal year beginning in 2022 and ending in 2031, equal to the lesser of (A) 5% of the shares of stock outstanding on the last day of the immediately preceding fiscal year, and (B) such smaller number of shares of stock as determined by our board of directors; provided, however, that no more than shares of stock may be issued upon the exercise of incentive stock options.

The following counting provisions will be in effect for the share reserve under the 2021 Plan:

- to the extent that an award terminates, expires or lapses for any reason or an award is settled in cash without the delivery of shares, any shares subject to the award at such time will be available for future grants under the 2021 Plan;
- to the extent shares are tendered or withheld to satisfy the grant, exercise price or tax withholding obligation with respect to any award under the 2021 Plan, such tendered or withheld shares will be available for future grants under the 2021 Plan;
- to the extent that shares of our common stock awarded by us are repurchased by us prior to vesting so that shares are returned to us, such shares will be available for future grants under the 2021 Plan;
- the payment of dividend equivalents in cash in conjunction with any outstanding awards will not be counted against the shares available for issuance under the 2021 Plan; and
- to the extent permitted by applicable law or any exchange rule, shares issued in assumption of, or in substitution for, any outstanding awards of any entity acquired in any form of combination by us or any of our subsidiaries will not be counted against the shares available for issuance under the 2021 Plan.

The 2021 Plan will include limits with respect to non-employee directors. A non-employee director shall not receive total compensation for any fiscal year of the Company that exceeds $750,000, or $1,000,000 in the year of the director's initial appointment to the Board. For this purpose total compensation is the sum of the grant date fair value of any equity or equity-based awards granted to such non-employee director during such fiscal year, and the amount of cash fees or awards payable to such non-employee director in respect of such service during any fiscal year, including any such amounts that are voluntarily deferred by the non-employee director.

Administration. The compensation committee of our board of directors is expected to administer the 2021 Plan unless our board of directors assumes authority for administration. The compensation committee must consist of at least three members of our board of directors, each of whom is intended to qualify as a "non-employee director" for purposes of Rule 16b-3 under the Exchange Act and an "independent director" within the meaning of the rules of the Nasdaq Global Select Market, or other principal securities market on which shares of our common stock are traded. The 2021 Plan provides that the board of directors or the compensation committee may delegate its authority to grant awards to employees other than executive officers and certain senior executives of our company to a committee consisting of one or more members of our board of directors or one or more of our officers, other than awards made to our non-employee directors, which must be approved by our full board of directors.

Subject to the terms and conditions of the 2021 Plan, the administrator has the authority to select the persons to whom awards are to be made, to determine the number of shares to be subject to awards, and the terms and conditions of awards, and to make all other determinations and to take all other actions necessary or advisable for the administration of the 2021 Plan. The administrator is also authorized to adopt, amend, or rescind rules relating to administration of the 2021 Plan. Our board of directors may at any time remove the compensation committee as the administrator and revest in itself the authority to administer the 2021 Plan. The full board of directors will administer the 2021 Plan with respect to awards to non-employee directors.

Eligibility. Options, SARs, restricted stock, performance stock, and all other stock-based awards under the 2021 Plan may be granted to individuals who are then our officers, employees, or consultants or are the officers, employees, or consultants of certain of our subsidiaries. Such awards also may be granted to our directors. Only employees of our company or certain of our subsidiaries may be granted incentive stock options, or ISOs.

Awards. The 2021 Plan provides that the administrator may grant or issue stock options, SARs, restricted stock, restricted stock units, performance stock, performance stock units, other stock-based awards, and dividend equivalents, or any combination thereof. Each award will be set forth in a separate agreement with the person receiving the award and will indicate the type, terms, and conditions of the award.

- *Nonstatutory Stock Options*, or NSOs, will provide for the right to purchase shares of our common stock at a specified price which may not be less than fair market value on the date of grant, and usually will become exercisable (at the discretion of the administrator) in one or more installments after the grant date, subject to the participant's continued employment or service with us and/or subject to the satisfaction of corporate performance targets and individual performance targets established by the administrator. NSOs may be granted for any term specified by the administrator that does not exceed ten years.

- *Incentive Stock Options*, or ISOs, will be designed in a manner intended to comply with the provisions of Section 422 of the Tax Code and will be subject to specified restrictions contained in the Tax Code. Among such restrictions, ISOs must have an exercise price of not less than the fair market value of a share of common stock on the date of grant, may only be granted to employees, and must not be exercisable after a period of ten years measured from the date of grant. In the case of an ISO granted to an individual who owns (or is deemed to own) at least 10% of the total combined voting power of all classes of our capital stock, the 2021 Plan provides that the exercise price must be at least 110% of the fair market value of a share of common stock on the date of grant and the ISO must not be exercisable after a period of five years measured from the date of grant.

- *Restricted Stock and Performance Stock* may be granted to any eligible individual and made subject to such restrictions as may be determined by the administrator, which in the case of performance stock will include performance-based restrictions. Restricted stock and performance stock, typically, may be forfeited for no consideration or repurchased by us at the original purchase price if the conditions or restrictions on vesting are not met. In general, such stock may not be sold or otherwise transferred until restrictions are removed or expire. Recipients of restricted stock and performance stock, unlike recipients of options, will have voting rights and will have the right to receive dividends, if any, prior

to the time when the restrictions lapse, however, extraordinary dividends will generally be placed in escrow, and will not be released until restrictions are removed or expire.

- *Restricted Stock Units and Performance Stock Units* may be awarded to any eligible individual, typically without payment of consideration, but subject to vesting conditions based on continued employment or service or on performance criteria established by the administrator. Like restricted stock and performance stock, such units may not be sold, or otherwise transferred or hypothecated, until vesting conditions are removed or expire. Unlike restricted stock and performance stock, stock underlying such units will not be issued until the units have vested, and recipients of units generally will have no voting or dividend rights prior to the time when vesting conditions are satisfied.

- *Stock Appreciation Rights*, or SARs, may be granted in connection with stock options or other awards, or separately. SARs granted in connection with stock options or other awards typically will provide for payments to the holder based upon increases in the price of our common stock over a set exercise price. The exercise price of any SAR granted under the 2021 Plan must be at least 100% of the fair market value of a share of our common stock on the date of grant. There are no restrictions specified in the 2021 Plan on the exercise of SARs or the amount of gain realizable therefrom, although restrictions may be imposed by the administrator in the SAR agreements. SARs under the 2021 Plan will be settled in cash or shares of our common stock, or in a combination of both, at the election of the administrator.

- *Other Stock-Based Awards* are awards of fully vested shares of our common stock and other awards valued wholly or partially by referring to, or otherwise based on, shares of our common stock. Other stock-based awards may be granted to participants and may also be available as a payment form in the settlement of other awards, as standalone payments, and as payment in lieu of base salary, bonus, fees, or other cash compensation otherwise payable to any individual who is eligible to receive awards. The plan administrator will determine the terms and conditions of other stock-based awards, which may include vesting conditions based on continued service, performance, and/or other conditions.

- *Dividend Equivalents* represent the right to receive the equivalent value of dividends paid on shares of our common stock and may be granted alone or in tandem with awards other than stock options or SARs. Dividend equivalents are credited as of dividend payments dates during the period between a specified date and the date such award terminates or expires, as determined by the plan administrator.

Any award may be granted as a performance award, meaning that the award will be subject to vesting and/or payment based on the attainment of specified performance goals.

Change in Control. In the event of a change in control where the acquirer does not assume or replace awards granted prior to the consummation of such transaction, awards issued under the 2021 Plan may be subject to accelerated vesting in the discretion of the administrator, such that 100% of such awards will become vested and exercisable or payable, as applicable. In addition, the administrator will also have complete discretion to structure one or more awards under the 2021 Plan to provide that such awards will become vested and exercisable or payable on an accelerated basis in the event such awards are assumed or replaced with equivalent awards, including in such circumstances where the individual's service with us or the acquiring entity is subsequently terminated within a designated period following the change in control event. The administrator may also make appropriate adjustments to awards under the 2021 Plan and is authorized to provide for the acceleration, cash-out, termination, assumption, substitution, or conversion of such awards in the event of a change in control or certain other unusual or nonrecurring events or transactions. Under the 2021 Plan, a change in control is generally defined as:

- the transfer or exchange in a single transaction or series of related transactions by our stockholders of more than 50% of our voting stock to a person or group;

- a change in the composition of our board of directors such that incumbent directors cease to constitute a majority of the board;
- the consummation of a merger, consolidation reorganization or business combination, a sale or disposition of all or substantially all of the Company's assets or the acquisition of assets or stock of another entity, other than a transaction (i) that results in our outstanding voting securities immediately before the transaction continuing to represent a majority of the voting power of the acquiring company's outstanding voting securities; (ii) after which no person or group beneficially owns 50% or more of the outstanding voting securities of the surviving entity immediately after the transaction; and (iii) after which at least a majority of the board of the successor entities were board members at the time of the approval of the transaction; or
- our liquidation or dissolution.

Adjustments of Awards. In the event of any stock dividend or other distribution, stock split, reverse stock split, reorganization, combination, or exchange of shares, merger, consolidation, split-up, spin-off, recapitalization, repurchase, or any other corporate event affecting the number of outstanding shares of our common stock or the share price of our common stock that would require adjustments to the 2021 Plan or any awards under the 2021 Plan in order to prevent the dilution or enlargement of the potential benefits intended to be made available thereunder, the administrator will make appropriate, proportionate adjustments to:

- the aggregate number and type of shares subject to the 2021 Plan;
- the number and kind of shares subject to outstanding awards and terms and conditions of outstanding awards (including, without limitation, any applicable performance targets or criteria with respect to such awards); and
- the grant or exercise price per share of any outstanding awards under the 2021 Plan.

Amendment and Termination. The administrator may terminate, amend, or modify the 2021 Plan at any time and from time to time. However, we must generally obtain stockholder approval to the extent required by applicable law, rule, or regulation (including any applicable stock exchange rule). Notwithstanding the foregoing, an option may be amended to reduce the per share exercise price below the per share exercise price of such option on the grant date and options may be granted in exchange for, or in connection with, the cancellation or surrender of options having a higher per share exercise price without receiving additional stockholder approval.

Termination. The board of directors may terminate the 2021 Plan at any time. No awards, including incentive stock options, may be granted pursuant to the 2021 Plan after the 10th anniversary of the effective date of the 2021 Plan, and no additional annual share increases to the 2021 Plan's aggregate share limit will occur from and after such anniversary. Any award that is outstanding on the termination date of the 2021 Plan will remain in force according to the terms of the 2021 Plan and the applicable award agreement.

We intend to file with the SEC a registration statement on Form S-8 covering the shares of our common stock issuable under the 2021 Plan.

2021 Employee Stock Purchase Plan

We expect that our board of directors will adopt, and our stockholders will approve prior to the closing of this offering, our 2021 Employee Stock Purchase Plan, or the 2021 ESPP. The 2021 ESPP will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. The principal purpose of the 2021 ESPP is to secure the services of new employees, to retain the services of existing employees, and to provide incentives for such individuals to exert maximum efforts toward our success. The 2021 ESPP includes two components. One component is intended to qualify for favorable tax treatment under Section 423 of the Tax Code. The second component allows for the grant of purchase rights that does not qualify

for favorable tax treatment due to deviations in an offering and to permit participation by eligible employees who are employed outside of the United States in compliance with the laws of other jurisdictions.

Shares available. We have initially reserved shares of our common stock for sale under the 2021 ESPP. The aggregate number of shares reserved for sale under our 2021 ESPP will increase automatically on January 1 of each of the first 10 calendar years after the first offering date by the number of shares equal to the lesser of 1% of the total outstanding shares of our common stock as of the immediately preceding December 31 (rounded to the nearest whole share) or a number of shares as may be determined by our board of directors in any particular year. The aggregate number of shares issued over the term of the 2021 ESPP, subject to stock-splits, recapitalizations, or similar events, may not exceed shares of our common stock.

Administration. The 2021 ESPP will be administered by the compensation committee of our board of directors, or by our board of directors acting in place of our compensation committee, subject to the terms and conditions of the 2021 ESPP. Among other things, the compensation committee will have the authority to determine eligibility for participation in the 2021 ESPP, designate separate offerings under the plan, and construe, interpret, and apply the terms of the plan.

Eligibility. Employees eligible to participate in any offering pursuant to the 2021 ESPP generally include any employee who is employed by us or certain of our designated subsidiaries at the beginning of the offering period. However, our compensation committee may determine that employees who are customarily employed for 20 hours or less per week or for five months or less in a calendar year, certain "highly compensated" employees, or employees resident in a foreign jurisdiction whose participation is either prohibited under local law, or where compliance with local law would violate Section 423 of the Tax Code, may not be eligible to participate in the 2021 ESPP. In addition, any employee who owns (or is deemed to own as a result of attribution) 5% or more of the total combined voting power or value of all classes of our capital stock, or the capital stock of one of our qualifying subsidiaries, or who will own such amount as a result of participation in the 2021 ESPP, will not be eligible to participate in the 2021 ESPP. The compensation committee of our board of directors may impose additional restrictions on eligibility from time to time.

Offerings. Under the 2021 ESPP, eligible employees will be offered the option to purchase shares of our common stock at a discount over a series of offering periods. Each offering period may itself consist of one or more purchase periods with purchase dates, and on the purchase dates shares of our common stock will be purchased for employees participating in the offering. No offering period may be longer than 27 months. An offering under the 2021 ESPP may be terminated under certain circumstances.

Participation. Participating employees will be able to purchase the offered shares of our common stock by accumulating funds through payroll deductions or through cash payments. Participants may select a rate of payroll deduction between 1% and 15% of their eligible compensation, as defined in the 2021 ESPP. However, a participant may not subscribe for more than $25,000 in fair market value of shares of our common stock (determined as of the date the offering period commences) in any calendar year in which the offering is in effect.

Unless otherwise determined by the compensation committee of our board of directors, the purchase price for shares of our common stock purchased under the 2021 ESPP will be 85% of the lesser of the fair market value of our common stock on (i) the first trading day of the applicable offering period or (ii) the last trading day of each purchase period in the applicable offering period. For the initial offering, which we expect will commence on the effectiveness of the registration statement for this offering, the fair market value of our common stock on the first day of the offering period will be the price at which the shares of our common stock are first sold to the public.

Once an employee becomes a participant in an offering period, the participant will be automatically enrolled in each subsequent offering period at the same contribution level. A participant may reduce their contribution in accordance with procedures set forth by the compensation committee and may withdraw from participation in the 2021 ESPP at any time prior the end of an offering period, subject to time restrictions

specified in the plan or such other time as may be specified by the compensation committee. Upon withdrawal, the accumulated payroll deductions will be returned to the participant without interest.

Adjustments upon Recapitalization. If the number of outstanding shares of our common stock is changed by stock dividend, recapitalization, stock split, reverse stock split, subdivision, combination, reclassification, or similar change in our capital structure without consideration, then our compensation committee will proportionately adjust the number and class of common stock that is available under the 2021 ESPP, the purchase price and number of shares any participant has elected to purchase, as well as the maximum number of shares that may be purchased by participants. The 2021 ESPP also includes provisions for adjustment in the event a change in corporate structure or similar transaction occurs.

Change of Control. If we experience a corporate transaction, the compensation committee of our board of directors may elect to shorten a purchase period in anticipation of the transaction, in which case the participants' accumulated contributions would be used to purchase shares prior to the consummation of the corporate transactions with the resulting termination of the purchase rights, and/or suspend the plan. Alternatively, it may require outstanding rights to purchase shares to be assumed or an equivalent option substituted by the successor corporation.

Transferability. Participants may not assign, transfer, pledge, or otherwise dispose of payroll deductions or cash payments credited to their account, or any rights with regard to an election to purchase shares pursuant to the 2021 ESPP other than by will or the laws of descent or distribution.

Amendment; Termination. The compensation committee of our board of directors may amend, suspend, or terminate the 2021 ESPP at any time without stockholder consent, except as required by law. The 2021 ESPP will continue until the earlier to occur of (a) termination of the 2021 ESPP by our board of directors, (b) issuance of all of the shares reserved for issuance under the 2021 ESPP, or (c) the 10th anniversary of the first purchase date under the 2021 ESPP.

Outstanding Awards at Fiscal Year-End Table

The following table sets forth information concerning outstanding equity awards held by each of our named executive officers as of December 31, 2020:

	Option awards				
Name	Vesting commencement date(1)	Number of securities underlying unexercised options exercisable (#)	Number of securities underlying unexercised options unexercisable (#)	Option exercise price ($/share)	Option expiration date
Rachel E. Haurwitz, Ph.D.	6/12/2018	46,875	28,125	5.368	6/11/2023
Steven B. Kanner, Ph.D.	6/30/2017	97,540	18,672	3.29	7/11/2027
	6/30/2017	2,684	384	3.29	3/7/2028
	10/1/2019	23,543	57,177	4.88	9/30/2029
Barbara G. McClung, J.D.	4/29/2015	129,445	—	0.72	7/17/2025
	7/12/2016	22,681	—	2.94	7/11/2026
	6/12/2018	196	119	4.88	6/11/2028
	10/1/2019	23,543	57,177	4.88	9/30/2029

(1) 1/4th of the shares subject to the option on the one-year anniversary of the vesting commencement date and an additional 1/48th of the aggregate number of shares subject to the option vests on the corresponding day of each month thereafter (or if there is no such corresponding day, on the last day of such month), subject to continued service to us thorough the applicable vesting date.

Severance and Change of Control Payments and Benefits

Employment Agreement with our Named Executive Officers and Mr. O'Byrne

Our amended and restated employment agreements with each of our named executive officers and Mr. O'Byrne, which will become effective upon the closing of this offering, provide that in the event the executive terminates their employment for "good reason" or we terminate their employment without "cause" (in each case defined in their employment agreement), they are entitled to receive the following benefits, in addition to any accrued obligations and subject to their execution of a separation agreement containing a general release of claims in our favor and obligations regarding confidentiality, return of property, and non-disparagement: (i) any base salary earned through the date of termination; (ii) unpaid expense reimbursement in accordance with our policy; (iii) unused vacation that accrued through the date of termination on or before the time required by law but in no event more than thirty days after the date of termination; (iv) any vested benefits under any of our employee benefit plans through the date of termination; (v) nine months of base salary (12 months in the case of Dr. Haurwitz); (vi) continuation of healthcare insurance coverage for nine months (12 months in the case of Dr. Haurwitz) or the COBRA health continuation period, whichever ends earlier; and (vii) 100% of their unvested stock options and restricted stock outstanding as of the effective date of the amended and restated employment agreements, if any, will become immediately vested and immediately prior to the expiration of the three month post-termination exercise period for the stock options, such period will be extended so they will have 12 months from the date of termination in which to exercise their stock options (regardless of any language to the contrary in any stock plan then in effect, but subject to the expiration date of the stock options). The amounts payable under items (v) and (vi) will be paid out in substantially equal installments in accordance with our payroll practice over nine months (12 months in the case of Dr. Haurwitz) commencing on the first regularly scheduled payroll date that is at least 30 days after the date of termination, provided that the separation agreement becomes fully effective.

In the event that the executive's employment is terminated by us without "cause" or the executive terminates their employment for "good reason" within 12 months after a change in control, or within three months prior to a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company's assets under Section 409A of the Tax Code, which we refer to as a 409A Change in Control, subject to their execution of a separation agreement containing a general release of claims in our favor and obligations regarding confidentiality, return of property, and non-disparagement, they will be entitled to the benefits set forth above, provided that the number of months of base salary and benefits continuation shall be increased to 12 months (18 months in the case of Dr. Haurwitz) and the executives shall be entitled to 1.0 times their target annual bonus (1.5 times in the case of Dr. Haurwitz). The target bonus amount is paid on the first regularly scheduled payroll date that is at least 30 days after the date of termination (or date of the 409A Change in Control, for an executive who is terminated prior to the change in control), and if the change in control is a 409A Change in Control, the severance amounts will be payable as a lump sum on the first regularly scheduled payroll date that is at least 30 days following the termination date (or date of the 409A Change in Control for an executive who is terminated prior to the change in control), subject to the separation agreement having become fully effective (for clarity, the COBRA payments set forth above will be paid in accordance with the timing set forth above).

Each executive's amended and restated employment agreement defines "cause" to mean the occurrence of any one or more of the following, subject to certain notice and cure rights: (i) conduct constituting a material act of misconduct in connection with the performance of their duties, including, without limitation, misappropriation of funds or property of our company; (ii) the commission of any felony or a misdemeanor involving moral turpitude, deceit, dishonesty or fraud, or any conduct that would reasonably be expected to result in material injury or reputational harm to our company if they were retained in their position; (iii) continued non-performance of duties, other than by reason of physical or mental illness, incapacity or disability, that has continued for more than thirty days following written notice of such non-performance from the board of directors; (iv) a material violation of our written policies; or (v) failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by us to

cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

Each executive's amended and restated employment agreement defines "good reason" to mean the occurrence of any one or more of the following, subject to certain notice and cure rights: (i) a material diminution in their responsibilities, authority or duties; (ii) the assignment of duties that are materially inconsistent with their position; (iii) a decrease of more than 10% of their base salary except for across-the-board reductions based on our financial performance similarly affecting all of our executive officers; (iv) a change in the Company's location at which they perform their duties to a location more than 50 miles driving distance from the original location; and (v) a material breach of the employment agreement by us.

Each executive's amended and restated employment agreement defines "change in control" as any of the following: (i) any "person," as such term is used in Sections 13(d) and 14(d) of the Exchange Act, other than us, any of our subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of our company or any of our subsidiaries, together with all "affiliates" and "associates," as such terms are defined in Rule 12b-2 under the Exchange Act, of such person, becomes the "beneficial owner," as such term is defined in Rule 13d-3 under the Exchange Act, directly or indirectly, of securities of our company representing 50% or more of the combined voting power of our then outstanding voting securities, in such case other than as a result of an acquisition of securities directly from the Company; or (ii) the date a majority of our board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of our board before the date of the appointment or election; or (iii) the consummation of (A) a consolidation or merger of our company where our stockholders, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own, as such term is defined in Rule 13d-3 under the Exchange Act, directly or indirectly, shares representing in the aggregate more than 50% of the voting shares of our company issuing cash or securities in the consolidation or merger, or of its ultimate parent corporation, if any, or (B) any sale or other transfer, in one transaction or a series of transactions contemplated or arranged by any party as a single plan, of all or substantially all of the assets of the Company. Certain of the foregoing events that result solely from an acquisition of securities by the Company are not considered a "change in control."

2013 Equity Incentive Plan

Under the terms of the 2013 Plan, in the event of a merger, consolidation, or other capital reorganization or business combination transaction with or into another corporation, entity or person, or a change in control, each outstanding award will be treated as our board of directors, or a committee thereof appointed by our board of directors, determines, including, without limitation, that (i) awards will be assumed, or substantially equivalent awards will be substituted, by the acquiring or succeeding corporation, or an affiliate thereof, with appropriate adjustments as to the number and kind of shares and prices; (ii) the awards will terminate upon or immediately prior to the consummation of such merger or change in control for no consideration; (iii) outstanding awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an award will lapse, in whole or in part prior to or upon consummation of such merger or change in control, and, to the extent our board of directors, or a committee thereof appointed by our board of directors, determines, terminate upon or immediately prior to the effectiveness of such merger or change in control; (iv) the termination of an award or forfeiture of shares that are unvested at the time of the transaction in exchange for an amount of cash and/or property, if any, equal to the excess of the fair market value or the exercise price or purchase price paid or to be paid for the shares subject to the awards; (v) the continuation of such outstanding awards if we are the surviving corporation; or (vi) any combination of the foregoing.

2012 Stock Option/Stock Issuance Plan

Under the terms of the 2012 Plan, in the event of a merger, consolidation, other reorganization or sale of all or substantially all of our assets, the shares subject to each option outstanding under the 2012 Plan will

automatically vest in full so that each such option will, immediately prior to the effective date of the change in control, become exercisable for all of the shares of common stock at the time subject to that option and may be exercised for any or all of those shares as fully-vested shares of common stock. However, the shares subject to an outstanding option will not vest on such an accelerated basis if and to the extent: (i) such option is assumed by the successor corporation, or parent thereof, or otherwise continued in full force and effect pursuant to the terms of the change in control transaction and any our repurchase rights with respect to any unvested shares purchasable under the option are concurrently assigned to such successor corporation, or parent thereof; (ii) such option is to be replaced with a cash retention program or any successor corporation which preserves the spread existing on the unvested option shares at the time of the change of control and provides for subsequent payout of that spread in accordance with the same vesting schedule applicable to those unvested option shares; or (iii) the acceleration of such option is subject to other limitations imposed by the our board of directors, or a committee thereof appointed by our board of directors, at the time of the option grant.

Other Elements of Compensation

Retirement Plan

We maintain a defined contribution employee retirement plan, or 401(k) Plan, for our executive officers and employees. Our 401(k) Plan is intended to qualify as a tax-qualified plan under Section 401(a) of the Tax Code. Our 401(k) Plan provides that each participant may contribute up to the lesser of 100% of their compensation or the statutory limit, which was $19,500 for calendar year 2020. Participants who are 50 years or older can also make “catch-up” contributions, which in calendar year 2020 were up to an additional $6,500 above the statutory limit. We currently make matching contributions into the 401(k) Plan on behalf of our participants. We match 100% of eligible contributions up to the first 4% of compensation. Participant contributions are held and invested, pursuant to the participant’s instructions, by the Plan’s trustee.

Employee Benefits and Perquisites

All of our executive officers and employees are eligible to participate in our employee benefit plans, including our medical, dental, vision, disability and life insurance plans.

No Tax Gross-Ups

We do not make gross-up payments to cover our executive executive officers’ personal income taxes that may pertain to any of the compensation or perquisites paid or provided by us.

Non-Employee Director Compensation

The following table sets forth information concerning the compensation awarded to, earned by or paid to our non-employee directors during the fiscal year ended December 31, 2020. Dr. Haurwitz does not receive compensation for her service as a director. Dr. Haurwitz’s compensation for 2020 is included with that of our other named executive officers in the Summary Compensation Table (2020 and 2019) above.

Name	Fees Earned or Paid in Cash ($)	Option Awards(2) ($)	Total ($)
Philip Austin(1)	—	—	—
Natalie R. Sacks(2)	$ 30,000	$ 30,866	$ 60,866
Robert Weisskoff(3)	—	—	—

(1) Mr. Austin resigned from our board of directors, effective March 2, 2021.

(2) As of December 31, 2020, Dr. Sacks held stock options to purchase an aggregate of 40,000 shares of our common stock, of which 25,000 shares have vested, and 833 shares will vest each month through June 2022.

(3) Dr. Weisskoff resigned from our board of directors, effective March 30, 2021.

Director Compensation

In respect of their service on our board of directors in fiscal year 2020, our non-employee directors who were not affiliated with a stockholder were each entitled to receive $30,000 per year, paid in quarterly installments of $7,500. Dr. Sacks was the only director who received that compensation in 2020 and she will receive non-employee director compensation in 2021.

Director Compensation Policy

In connection with this offering, our board of directors will adopt a non-employee director compensation policy, which will become effective upon the completion of this offering. Under the non-employee director compensation policy, our non-employee directors, will be compensated as follows following this offering:

- each non-employee director will receive an annual cash fee of $40,000;
- any non-executive chair of the board of directors will receive an additional annual cash fee of $35,000;
- each non-employee director who is a member of the audit committee will receive an additional annual cash fee of $7,500 ($15,000 for the audit committee chair);
- each non-employee director who is a member of the compensation committee will receive an additional annual cash fee of $5,000 ($10,000 for the compensation committee chair); and
- each non-employee director who is a member of the nominating and corporate governance committee will receive an additional annual cash fee of $4,000 ($8,000 for the nominating and corporate governance committee chair).

All cash fees will be paid quarterly, in arrears, or upon the earlier resignation or removal of the non-employee director. The amount of each payment will be prorated for any portion of a calendar quarter that a non-employee director is not serving on our board of directors, based on the number of calendar days served by such non-employee director.

Each non-employee director is entitled to reimbursement for reasonable travel and other expenses incurred in connection with attending meetings of our board of directors and any committee on which they serve.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions we have entered into since January 1, 2018, and any currently proposed transactions, to which we were or are expected to be a participant in which (i) the amount involved exceeded or will exceed the lesser of $120,000 or one percent of our total assets at year end for the last two completed fiscal years (in our case, $120,000), and (ii) any of our executive officers, directors, or holders of more than 5% of any class of our voting securities, or any affiliate or member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest, other than the compensation and other arrangements we describe under "Executive and Director Compensation."

Loan to Dr. Haurwitz

On November 27, 2018, we entered into a promissory note made by Dr. Haurwitz in favor of us in the principal amount of $1,100,000 with interest at a rate of 3.04% compounded annually, on the unpaid balance of such principal sum. The entire unpaid principal balance of the promissory note, together with the accrued and unpaid interest, becomes due and payable on November 27, 2023. Prepayment of the principal balance of the promissory note, together with accrued and unpaid interest, may be made in whole or in part at any time without penalty. In order to secure the payment of the promissory note, we entered into a Pledge and Security Agreement with Dr. Haurwitz where she pledged and granted us a security interest in 225,410 shares of our common stock held by her. On June 7, 2021, Dr. Haurwitz repaid the loan in full to us, including approximately $86,573 of accrued interest. Dr. Haurwitz is one of our co-founders, our President and Chief Executive Officer, a director, and a holder of greater than 5% of our common stock.

Transactions with Dr. Doudna

Dr. Doudna holds greater than 5% of our common stock, is one of our co-founders, and is a member of our Scientific Advisory Board, or SAB. We paid Dr. Doudna $156,250 in fiscal year 2018 for her services on our SAB and a second scientific advisory board related to a proposed new investment that did not materialize. We paid Dr. Doudna $125,000 in fiscal year 2019 for her service on our SAB. In fiscal year 2020, we and Dr. Doudna agreed to a SAB compensation of $25,000 for her service on our SAB. Dr. Doudna currently receives an annual payment of $125,000 for serving as a member of our SAB.

Licensing Agreement Transaction

On May 15, 2020, we entered into an exclusive license agreement in a defined field under certain intellectual property rights and know-how to a private company controlled by Anterra F&A Ventures I Coöperatief U.A., or Anterra. At the time the license was granted, Anterra was a holder of approximately 6.5% of our common stock, assuming conversion of all of its preferred stock into common stock, and one of Anterra's principals, Philip Austin, was a member of our board of directors. Mr. Austin resigned from our board of directors in March 2021. In exchange for the license, we received shares of preferred stock in the private company with a transaction value of approximately $7.5 million, which represented a material equity ownership position in the private company at that time and the right to hold one of the three seats on the private company's board of directors.

Dr. Haurwitz is currently on the board of the private company. The license agreement provides for milestone payments and royalty payments to us on future sales of licensed products by the private company. The private company may select one of several milestone payment amounts for each licensed product, which then dictates the applicable royalty rate for net sales of licensed products. We are also eligible to receive a percentage of sublicensing revenues earned by the private company. On May 15, 2020, we entered into a separate option agreement under which we granted the private company a three-year option to negotiate an exclusive, royalty-bearing, worldwide license in a defined field to certain CRISPR Cas9 patent rights controlled by us. We received a $50,000 upfront option payment and may receive annual option fees and an option exercise fee.

Amended and Restated Collaboration and License Agreement with Pioneer

Pursuant to an amendment dated December 18, 2020, to the Pioneer Agreement, Pioneer assigned the chRDNA patent family to us and we agreed to make an upfront payment of $0.5 million; to pay all patent prosecution and maintenance costs going forward; to pay up to $2.8 million in regulatory milestones for therapeutic products developed by us, our affiliates, and licensees; to pay up to $20.0 million in sales milestones over a total of four therapeutics products sold by us, our affiliates, and licensees; and to pay a percentage of sublicensing revenues received by us for licensing the chRDNA patent family. To date, we have paid Pioneer $0.8 million in sublicensing fees. Pioneer is a wholly-owned subsidiary of E. I. du Pont de Nemours and Company, which at the time held approximately 13.3% of our capital stock, assuming conversion of all preferred stock into common stock. E. I. du Pont de Nemours and Company is a wholly-owned subsidiary of Corteva, Inc.

Series C Financing

PFM Health Sciences, LP and its affiliate funds, together, or PFM, and each of Ridgeback Capital Investments LP, or Ridgeback, and Zone III Healthcare Holdings, LLC (an affiliate of Farallon Capital Management, L.L.C.), or Zone III, each purchased 1,158,949 shares of our Series C preferred stock at a purchase price of $17.257 per share, for approximately $20.0 million. Each of PFM, Ridgeback, and Zone III became a beneficial owner of more than 5% of our capital stock as a result of such transaction.

AngelList-Cces-Fund, a series of AngelList-JR-Funds, LLC, or AngelList, is a 5% stockholder of our Series A-1 preferred stock. In March 2021, we issued an aggregate of 70,122 shares of Series C preferred stock at a purchase price of $17.257 per share to an affiliate of AngelList.

Each of Pacific Continental Investment Company, LLC, or Pacific Continental, and Pontifax Global Food and Agriculture Technology LP, or Pontifax, is a 5% stockholder of our Series B preferred stock. In March 2021, we issued an aggregate of 135,850 shares of Series C preferred stock at a purchase price of $17.257 per share to Pacific Continental and 135,848 shares of Series C preferred stock at a purchase price of $17.257 per share to Pontifax and two of its affiliates.

Public Offering Participation Rights

In connection with our Series C preferred stock financing, we entered into separate letter agreements in March 2021 with each of PFM, Ridgeback, and Zone III, each of which is a beneficial owner of more than 5% of our capital stock. The letter agreements grant each of those entities a participation right to purchase up to 10% of the shares of common stock in this offering at the public offering price, in compliance with and subject to all applicable laws and regulations. The letter agreements further provide that, under certain circumstances in which those entities are unable to participate in this offering, we are required to offer each of them shares of our common stock through a separate private placement to be concurrent with this offering. Furthermore, the letter agreements provide that if we undertake a private placement that is contemporaneous with or conditioned on this offering (other than the private placement described in the preceding sentence), we are required to offer each of those entities a right to purchase up to 10% of the securities to be sold in that private placement at the same price and on the same terms as offered to the other investors in that private placement. If, as a result of the exercise of its rights in this offering, any of PFM, Ridgeback, or Zone III would beneficially own more than 9.99% of our outstanding common stock after this offering, the letter agreements require us to work with such entity, subject to applicable law, to restructure its holdings so that it does not beneficially own more than 9.99% of our outstanding common stock, with the remainder of its shares to be converted either into a non-voting common stock or warrants to acquire our common stock, such warrants to be convertible or exercisable at the entity's option only if it would not result in that entity beneficially owning more than 9.99% of our then outstanding common stock. The letter agreements provide that those entities would have been entitled to similar rights had we undertaken a certain type of direct public offering or a transaction in which our shares were exchanged for or otherwise converted into securities that are publicly listed on a securities exchange with a vehicle commonly known as a

special purpose acquisition company, in either case, in lieu of this offering. Accordingly, each of PFM, Ridgeback, and Zone III may elect to purchase shares of common stock in this offering pursuant to such participation rights.

Investor Rights Agreement

In March 2021, we entered into an amended and restated investor rights agreement, or the investor rights agreement, with each holder of our convertible preferred stock, which includes certain holders of more than 5% of each class or series of our capital stock and entities with which certain of our directors are affiliated. The investor rights agreement imposes certain affirmative obligations on us and also grants certain rights to the holders, including certain registration rights with respect to the registrable securities held by them. See "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights. The investor rights agreement also provides for a right of first offer in favor of the holders of convertible preferred stock with regard to certain issuances of our capital stock. The rights of first offer will not apply to, and will terminate upon, the consummation of this offering.

Voting Agreement

In March 2021, we entered into an amended and restated voting agreement with certain holders of our common stock and convertible preferred stock, including all holders of 5% of each class or series of our capital stock. Upon the conversion of all outstanding shares of our convertible preferred stock into common stock in connection with the consummation of this offering, the amended and restated voting agreement will terminate. For a description of the amended and restated voting agreement, see the section titled "Management—Board Composition—Voting Arrangements." The prior amended and restated voting agreement with certain holders of our common stock and convertible preferred stock governed the election or appointment of board of directors prior to the March 2021 amendment and restatement of the voting agreement. Under the prior amended and restated voting agreement, each of F-Prime Capital Partners Healthcare Fund IV LP and Anterra F&A Ventures I Coöperatief U.A. had the right to designate a director. Pursuant to the March 2021 amendment and restatement of the voting agreement, and a further amendment entered into in March 2021, neither F-Prime Capital Partners Healthcare Fund IV LP nor Anterra F&A Ventures I Coöperatief U.A has the right to designate a director.

Right of First Refusal and Co-Sale Agreement

In March 2021, we entered into an amended and restated right of first refusal and co-sale agreement with certain holders of our common stock and convertible preferred stock. This agreement provides for rights of first refusal and co-sale relating to the shares of our common stock held by the parties to the agreement. Upon the consummation of this offering, the amended and restated right of first refusal agreement and co-sale agreement will terminate.

Employment or Offer Letter Agreements

We have entered into employment or offer letter agreements with certain of our executive officers. See "Executive and Director Compensation—Narrative Disclosure to Summary Compensation Table" for a further discussion of these arrangements.

We have granted stock options and/or restricted stock to our executive officers and certain of our directors. See the section of this prospectus captioned "Executive and Director Compensation."

Director and Officer Indemnification and Insurance

We have agreed to indemnify each of our directors and executive officers against certain liabilities, costs, and expenses, and have purchased directors' and officers' liability insurance. We also maintain a general

liability insurance policy that covers certain liabilities of directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. See the section of this prospectus captioned “Management—Limitation of Directors’ and Officers’ Liability and Indemnification.”

Related Person Transaction Policy

Our board of directors intends to adopt a written related person transaction policy, which will become effective upon the completion of this offering, setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy will cover, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement, or relationship, or any series of similar transactions, arrangements, or relationships, in which we were or are to be a participant, where the amount involved in any fiscal year exceeds the lesser of $120,000 or one percent of our total assets at year end for the last two completed fiscal years, and a related person had, has, or will have a direct or indirect material interest, including without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness, and employment by us of a related person. In reviewing and approving any such transactions, our audit committee has primary responsibility to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm’s length transaction and the extent of the related person’s interest in the transaction.

All of the transactions described in this section occurred prior to the adoption of this policy. Although we have not had a written policy for the review and approval of the transactions with related persons described in this section, our board of directors has historically reviewed and approved any transaction where a director or officer had a financial interest, including the transactions described above. Prior to approving such a transaction, the material facts as to relationship or interest of the relevant director or officer in the agreement or transaction was disclosed to our board of directors. Our board of directors took this information into account when evaluating the transaction and in determining whether such transaction was fair to us and in the best interest of all our stockholders.

PRINCIPAL STOCKHOLDERS

The following table presents information relating to the beneficial ownership of our common stock as of May 31, 2021, as if the conversion of our preferred stock into common stock on a one-for-one basis had occurred, by:

- each person, or group of affiliated persons, known by us to own beneficially more than 5% of our outstanding common stock;
- each of our named executive officers and directors; and
- our executive officers and directors as a group.

The number of shares of common stock beneficially owned by each entity, person, executive officer or director is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares of common stock over which the individual has sole or shared voting power or investment power as well as any shares of common stock that the individual has the right to acquire within 60 days of May 31, 2021, through the exercise of any option, warrant or other right. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock held by that person.

The percentage of outstanding common stock is computed on the basis of 20,155,504 shares of common stock outstanding as of May 31, 2021, assuming the conversion of all our outstanding shares of preferred stock on a one-for-one basis into 14,430,522 shares of common stock. Shares of common stock that a person has the right to acquire within 60 days of May 31, 2021, are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all named executive officers and directors as a group. The percentage ownership information after this offering, as shown in the table below, is based upon shares outstanding, assuming the sale of shares of our common stock by us in the offering and no exercise of the underwriters' option to purchase additional shares of common stock. Unless otherwise indicated below, the address for each beneficial owner is 2929 7th Street, Suite 105, Berkeley, California 94710.

Stockholder	Shares of Common Stock Beneficially Owned Prior to this Offering		Shares of Common Stock Beneficially Owned After this Offering	
	Shares	%	Shares	%
5% Stockholders				
F-Prime Capital Partners Healthcare Fund IV LP and affiliates(1)	1,878,713	9.32		
E. I. du Pont de Nemours and Company(2)	1,733,395	8.60		
James and Jennifer Doudna Cate Living Trust DTD 01/02/2014(3)	1,266,663	6.28		
Entities affiliated with PFM Health Sciences, LP(4)	1,158,949	5.75		
Ridgeback Capital Investments L.P.(5)	1,158,949	5.75		
Zone III Healthcare Holdings, LLC(6)	1,158,949	5.75		
Named Executive Officers and Directors				
Rachel E. Haurwitz(7)	1,886,739	9.33		
Steven B. Kanner(8)	187,755	*		
Barbara G. McClung(9)	187,682	*		
Scott Braunstein(10)	—	—		
Andrew Guggenhime(11)	—	—		
Jeffrey Long-McGie(12)	—	—		
Natalie R. Sacks(13)	30,833	*		
All executive officers and directors as a group (8 persons)(14)	2,293,009	11.23		

* Indicates beneficial ownership of less than 1% of the total issued and outstanding shares of common stock.

(1) Consists of (a) 726,879 shares of common stock issuable upon conversion of our series A-1 preferred stock held by F-Prime Capital Partners Healthcare Fund IV LP, (b) 8,630 shares of common stock issuable upon conversion of our series A-1 preferred stock held by F-Prime Capital Partners Healthcare Advisors Fund IV LP, (c) 719,381 shares of common stock issuable upon conversion of our series A-1 preferred stock held by Impresa Fund III Limited Partnership and (d) 423,823 shares of common stock issuable upon conversion of our series B preferred stock held by F-Prime Capital Partners Healthcare Fund IV LP. The above entities and certain other entities related to the above entities are subject to a voting limitation that prevents these entities from voting any shares in excess of 4.99% (in the aggregate) of our total outstanding voting securities on certain matters. F-Prime Capital Partners Healthcare Advisors Fund IV LP is the general partner of F-Prime Capital Partners Healthcare Fund IV LP. F-Prime Capital Partners Healthcare Advisors Fund IV LP is solely managed by Impresa Management LLC, the managing member of its general partner and its investment manager. Impresa Fund III Limited Partnership is solely managed by Impresa Management LLC, its general partner and its investment manager. Impresa Management LLC is owned, directly or indirectly, by various shareholders and employees of FMR LLC. Impresa Management LLC is managed on a day-to-day basis by its President, B. Lane MacDonald, and as such, Mr. MacDonald may be deemed to have voting and dispositive power with respect to all shares held by F-Prime Capital Partners Healthcare Fund IV LP, F-Prime Capital Partners Healthcare Advisors Fund IV LP, and Impresa Fund III Limited Partnership. The individual and each of the entities listed above expressly disclaims beneficial ownership of the securities listed above not directly held by such individual or entity. The address of the above entities is 245 Summer Street, Boston, Massachusetts 02210.

(2) Consists of (a) 469,395 shares of common stock issuable upon conversion of our series A-1 preferred stock, (b) 999,111 shares of common stock issuable upon conversion of our series A preferred stock, and (c) 264,889 shares of common stock issuable upon conversion of our series B preferred stock. The address for E. I. du Pont de Nemours and Company is 974 Centre Road, Chestnut Run Plaza, Wilmington, Delaware 19805. E. I. du Pont de Nemours and Company is a is a wholly-owned subsidiary of Corteva, Inc., which may be deemed to have beneficial ownership of the shares held by E. I. du Pont de Nemours and Company.

(3) Consists of (a) 1,000,000 shares of common stock owned directly, (b) 150,206 shares of our series A-1 preferred stock, (c) 95,266 shares of common stock issuable upon conversion of our series A preferred stock, and (d) 21,191 shares of common stock issuable upon conversion of our series B preferred stock. Dr. Doudna is one of our co-founders and a member of our SAB.

(4) Consists of (a) 811,265 shares of common stock issuable upon conversion of our series C preferred stock beneficially owned by PFM Healthcare Master Fund, L.P., (b) 57,947 shares of common stock issuable upon conversion of our series C preferred stock beneficially owned by Partner Investments, L.P., and (c) 289,737 shares of common stock issuable upon conversion of shares of our series C preferred stock beneficially owned by PFM Healthcare Growth Equity Holdings I, LLC. PFM Health Sciences, LP is the investment advisor of PFM Healthcare Master Fund, L.P., Partner Investments, L.P., and PFM Healthcare Growth Equity Holdings I, LLC (collectively, the PFM Funds) and by virtue of those relationships may be deemed to have voting power and investment power over the securities held the PFM Funds and as a result may be deemed to have beneficial ownership of such securities. The address for PFM and the PFM Funds is 4 Embarcadero Center, Suite 3500, San Francisco, California 94111.

(5) Consists of 1,158,949 shares of common stock issuable upon conversion of our series C preferred stock. Ridgeback Capital Investments, LLC, or RCI, is the general partner of Ridgeback Capital Investments L.P., or RCILP. Pursuant to an investment management agreement, Ridgeback Capital Management, LLC, or RCM, maintains investment and voting power with respect to the securities held or controlled by RCI. Wayne Holman, an individual, controls RCM. By reason of the provisions of Rule 13d-3 of the Securities Exchange Act of 1934, as amended, RCM and RCI may be deemed to own beneficially all of shares owned directly by RCILP. Each of RCM and RCI disclaim beneficial ownership of any of the our company's securities referenced above. The address for RCILP, RCI, RCM and Mr. Holman is 30 Star Island Drive, Miami, Florida 33139.

(6) Consists of 1,158,949 shares of common stock issuable upon conversion of Series C convertible preferred stock held directly by Zone III Healthcare Holdings, LLC, or Zone III. Farallon Capital Management, L.L.C., or FCM, as the manager of Zone III, may be deemed to beneficially own such shares of common stock issuable to Zone III. Each of Philip D. Dreyfuss, Michael B. Fisch, Richard B. Fried, David T. Kim, Michael G. Linn, Rajiv A. Patel, Thomas G. Roberts, Jr., William Seybold, Andrew J.M. Spokes, John R. Warren, and Mark D. Wehrly, collectively referred to as the Farallon Managing Members, as a senior managing member or managing member, as the case may be, of FCM, in each case with the power to exercise investment discretion, may be deemed to beneficially own such shares of common stock issuable to Zone III. Each of FCM and the Farallon Managing Members disclaims beneficial ownership of any such shares of common stock. The address of Zone III Healthcare Holdings, LLC is c/o Farallon Capital Management, L.L.C., One Maritime Plaza, Suite 2100, San Francisco, California 94111.

(7) Consists of (a) 1,828,927 shares of common stock owned directly and (b) 57,812 shares subject to options exercisable within 60 days of May 31, 2021.

(8) Consists of (a) 50,000 shares of common stock owned directly and (b) 137,755 shares subject to options exercisable within 60 days of May 31, 2021.

(9) Consists of (a) 152,126 shares of common stock owned directly and (b) 35,556 shares subject to options exercisable within 60 days of May 31, 2021.

(10) Dr. Braunstein joined our board of directors in June 2021 and therefore did not beneficially own any of our securities as of May 31, 2021.

(11) Mr. Guggenhime joined our board of directors in April 2021 and therefore did not beneficially own any of our securities as of May 31, 2021.

(12) Mr. Long-McGie is a managing director at RCM. However, because he has no voting or dispositive power over the securities held by RCILP, he disclaims beneficial ownership of all securities owned by RCILP. As disclosed above, Mr. Long-McGie intends to resign from our board of directors in connection with the closing of this offering.

(13) Consists of 30,833 shares of common stock subject to options exercisable within 60 days of May 31, 2021.

(14) Consists of (i) 2,031,053 shares of common stock held directly by our current directors and executive officers and (ii) 261,956 shares subject to options exercisable within 60 days of May 31, 2021.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws that will be in effect upon the closing of this offering. Copies of these documents will be filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of our common stock and preferred stock reflect changes to our capital structure that will occur upon the closing of this offering.

General

Upon completion of this offering, our authorized capital stock will consist of shares, all with a par value of $0.0001 per share, of which:

- shares are designated as common stock; and
- shares are designated as preferred stock.
- As of May 31, 2021, we had outstanding 5,724,982 shares of common stock held of record by 49 stockholders. This amount excludes our outstanding 14,430,522 shares of convertible preferred stock, which will convert into 14,430,522 shares of our common stock in connection with the closing of this offering. Based on the number of shares of common stock outstanding as of May 31, 2021, and assuming (i) the conversion of all of our outstanding shares of convertible preferred stock, (ii) the issuance by us of shares of common stock in this offering and (iii) no exercise of any options after May 31, 2021, there will be approximately shares of common stock outstanding upon the closing of this offering.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights in the election of directors. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of preferred stock that we may designate and issue in the future.

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends as may be declared from time to time by our board of directors out of legally available funds.

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock will have no preemptive, subscription, redemption or conversion rights, and there are no redemption or sinking fund provisions applicable to our common stock. Our outstanding shares of common stock are, and the shares offered by us in this offering will be, when issued and paid for, validly issued, fully paid and non-assessable. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred Stock

Under the terms of our amended and restated certificate of incorporation that will become effective immediately prior to the closing of this offering, our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third-party to acquire, or could discourage a third-party from seeking to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding, and we have no present plans to issue any shares of preferred stock.

Options

As of May 31, 2021, we had outstanding options to purchase an aggregate of 3,088,275 shares of our common stock, with a weighted-average exercise price of $4.75 per share. For additional information regarding terms of our equity incentive plans, see the section of this prospectus titled “Executive and Director Compensation—Equity Incentive Plans.”

Registration Rights

The investor rights agreement grants the parties thereto certain registration rights in respect of the offer and sale of the “registrable securities” held by them, which securities include (i) the shares of our common stock issuable or issued by holders of shares of our convertible preferred stock, (ii) any common stock, or any common stock issued or issuable, directly or indirectly, upon conversion and/or exercise of any other of our securities, acquired by the investors party to the investor rights agreement after the date of the investor rights agreement and (iii) any common stock issued as, or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as, a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in the foregoing clauses (i) and (ii). The registration of the offer and sale of shares of our common stock pursuant to the exercise of these registration rights will enable the holders thereof to sell such shares without restriction under the Securities Act, when the applicable registration statement is declared effective. Under the investor rights agreement, we will pay all expenses relating to such registrations, including the fees of one counsel for the selling holders not to exceed $50,000 per registration, and the holders will pay all underwriting discounts and commissions relating to the sale of their shares. The investor rights agreement also includes customary indemnification and procedural terms.

There are 102 holders of shares of our common stock, including shares issuable upon the conversion of our outstanding shares of convertible preferred stock, who are entitled to such registration rights pursuant to the investor rights agreement. These registration rights will expire on the earliest to occur of (i) the closing of a deemed liquidation event, as such term is defined in our amended and restated certificate of incorporation; (ii) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such holder’s shares without limitation during a three-month period without registration, and without the requirement for the Company to be in compliance with the current public information required under Rule 144(c)(1), and (iii) the third anniversary of the closing of this offering.

Demand Registration Rights

Upon completion of this offering, holders of up to 14,430,522 shares of our common stock issuable upon conversion of outstanding preferred stock will be entitled to certain demand registration rights. At any time

beginning 180 days after the effective date of the registration statement of which this prospectus is a part, the holders of not less than a majority of the registrable securities then outstanding may request that we prepare, file, and maintain a registration statement on Form S-1 to register the offer and sale of all or part of their registrable securities if the aggregate offering price, net of selling expenses, of the registrable securities requested to be registered would exceed $20.0 million. Once we are eligible to use a registration statement on Form S-3, any stockholder party or parties to the investor rights agreement may, on not more than two occasions in any 12-month period, request that we prepare, file, and maintain a registration statement on Form S-3 covering the offer and sale of all or part of their registrable securities, but only if the anticipated offering price, net of selling expenses, of the registrable securities requested to be registered would be at least $1.0 million.

Piggyback Registration Rights

In connection with this offering, holders of up to 14,430,522 shares of our common stock issuable upon conversion of outstanding preferred stock are entitled to notice of this offering and to include their shares of registrable securities in this offering. The requisite percentage of these stockholders are expected to waive all such stockholders' rights to notice of this offering and to include their shares of registrable securities in this offering. In the event that we propose to register the offer and sale of any of our securities under the Securities Act in another offering, either for our own account or for the account of other security holders, the stockholders party to the investor rights agreement will be entitled to certain "piggyback" registration rights allowing them to include their registrable securities in such registration, subject to certain marketing and other conditions and limitations.

Anti-Takeover Effects of Our Certificate of Incorporation and Our Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws will contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors but which may have the effect of delaying, deferring, or preventing a future takeover or change in control of us unless such takeover or change in control is approved by our board of directors.

These provisions include:

Classified Board. Our amended and restated certificate of incorporation will provide that our board of directors will be divided into three classes of directors, with the classes as nearly equal in number as possible. As a result, approximately one-third of our board of directors will be elected each year. The classification of directors will have the effect of making it more difficult for stockholders to change the composition of our board. Our amended and restated certificate of incorporation will also provide that, subject to any rights of holders of preferred stock to elect additional directors under specified circumstances, the number of directors will be fixed exclusively pursuant to a resolution adopted by our board of directors. Upon completion of this offering, we expect that our board of directors will have members.

Action by Written Consent; Special Meetings of Stockholders. Our amended and restated certificate of incorporation will provide that stockholder action can be taken only at an annual or special meeting of stockholders and cannot be taken by written consent in lieu of a meeting. Our amended and restated certificate of incorporation and the bylaws will also provide that, except as otherwise required by law, special meetings of the stockholders can only be called pursuant to a resolution adopted by a majority of our board of directors. Except as described above, stockholders will not be permitted to call a special meeting or to require our board of directors to call a special meeting.

Removal of Directors. Our amended and restated certificate of incorporation will provide that our directors may be removed only for cause by the affirmative vote of at least % of the voting power of our outstanding shares of capital stock, voting together as a single class. This requirement of a supermajority vote to remove directors could enable a minority of our stockholders to prevent a change in the composition of our board.

Advance Notice Procedures. Our amended and restated bylaws will establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting, and who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although the amended and restated bylaws will not give our board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the amended and restated bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.

Supermajority Approval Requirements. The DGCL generally provides that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless either a corporation's certificate of incorporation or bylaws requires a greater percentage. Our amended and restated certificate of incorporation and amended and restated bylaws will provide that the affirmative vote of holders of at least % of the total votes eligible to be cast in the election of directors will be required to amend, alter, change, or repeal specified provisions. This requirement of a supermajority vote to approve amendments to our amended and restated certificate of incorporation and amended and restated bylaws could enable a minority of our stockholders to exercise veto power over any such amendments.

Authorized but Unissued Shares. Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions, and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger, or otherwise.

Exclusive Forum. Our amended and restated certificate of incorporation will require, to the fullest extent permitted by law, that derivative actions brought in the name of the Company, actions against directors, officers, and employees for breach of a fiduciary duty, and other similar actions may be brought only in specified courts in the State of Delaware. Under our amended and restated certificate of incorporation, this exclusive forum provision will not apply to claims that are vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery of the State of Delaware, or for which the Court of Chancery of the State of Delaware does not have subject matter jurisdiction and explicitly does not apply to actions arising under federal securities laws, including suits brought to enforce any liability or duty created by the Securities Act, Exchange Act, or the rules and regulations thereunder. Furthermore, our amended and restated bylaws will also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any compliant asserting a cause of action arising under the Securities Act. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, these provisions may have the effect of discouraging lawsuits against our directors and executive officers. See "Risk factors—Our amended and restated certificate of incorporation and amended and restated bylaws designates the state or federal courts within the State of Delaware as the exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees."

Section 203 of the DGCL

Upon completion of this offering, we will be subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock.

Under Section 203 of the DGCL, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions: (i) before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; (ii) upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or (iii) at or after the time the stockholder became interested, the business combination was approved by our board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have not opted out Section 203 of the DGCL. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent and registrar's address is 150 Royall Street, Canton, Massachusetts 02021.

Listing

We have applied to list our common stock on the Nasdaq Global Select Market under the symbol CRBU.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock in the public market could adversely affect market prices prevailing from time to time. Furthermore, because only a limited number of shares will be available for sale shortly after this offering due to existing contractual and legal restrictions on resale as described below, there may be sales of substantial amounts of our common stock in the public market after the restrictions lapse. This may adversely affect the prevailing market price and our ability to raise equity capital in the future.

Based on the number of shares of our common stock outstanding as of May 31, 2021, upon completion of this offering, assuming the conversion of all of our convertible preferred stock outstanding as of May 31, 2021, into an aggregate of 14,430,522 shares of our common stock in connection with the completion of this offering, and no exercise of the underwriters' option to purchase additional shares, we will have an aggregate of approximately shares of common stock outstanding. Of these shares, shares, or shares if the underwriters exercise their option to purchase additional shares in full, sold in this offering will be freely transferable without restriction or registration under the Securities Act, except for any shares purchased by one of our existing "affiliates," as that term is defined in Rule 144 under the Securities Act.

The remaining shares of common stock outstanding will be "restricted shares" as defined in Rule 144 and substantially all of these restricted shares will be subject to the 180-day lock-up period under the lock-up agreements as described below. Restricted shares and the shares of common stock into which such securities are convertible may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144 or 701 of the Securities Act, which rules are summarized below. As a result of the contractual lock-up period ending 180 days after the date of this prospectus and the provisions of Rules 144 and 701, these shares will be available for sale in the public market as follows:

Date Available for Sale	Shares Eligible for Sale*	Comment
Date of prospectus		Shares sold in the offering and shares that maybe sold under Rule 144 that are not subject to a lock-up
90 days after date of prospectus		Shares that are not subject to a lock-up and can be sold under Rule 144
180 days** after date of prospectus		Lock-up released; shares that can be sold under Rule 144

* Assumes that no options will be exercised on a "cashless" basis.

** 180 days corresponds to the lock-up period described below in "—Lock-Up Agreements." This lock-up period may be extended or shortened under certain circumstances as described in "Underwriting." However, BofA Securities, Inc., Citigroup Global Markets Inc., and SVB Leerink LLC may, in their sole discretion, release all or any portion of the shares from the restrictions in any of these agreements.

We may issue shares of common stock from time to time as consideration for future acquisitions, investments, or other corporate purposes. In the event that any such acquisition, investment, or other transaction is significant, the number of shares of common stock that we may issue may in turn be significant. We may also grant registration rights covering those shares of common stock issued in connection with any such acquisition and investment.

In addition, the shares of common stock reserved for future issuance under the 2021 Plan, the 2021 ESPP, and the 2013 Plan will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements, a registration statement under the Securities Act, or an exemption from registration, including Rule 144 and Rule 701.

Rule 144

In general, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell such securities, provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale; and (ii) we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares of our common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares; or
- the average weekly trading volume of shares of our common stock on the Nasdaq Global Select Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information, and notice provisions of Rule 144 to the extent applicable.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants, or advisors who acquired common stock from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 before the effective date of the registration statement of which this prospectus is a part, to the extent such common stock is not subject to a lock-up agreement, and who are not our "affiliates" as defined in Rule 144 during the immediately preceding 90 days, is entitled to rely on Rule 701 to resell such shares beginning 90 days after the date of this prospectus in reliance on Rule 144, but without complying with the notice, manner of sale, public information requirements, or volume limitation provisions of Rule 144. Persons who are our "affiliates" may resell those shares beginning 90 days after the date of this prospectus without compliance with minimum holding period requirements under Rule 144, subject to the terms of the lock-up agreement referred to below, if applicable.

The SEC has indicated that Rule 701 will apply to typical options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after an issuer becomes subject to the reporting requirements of the Exchange Act.

Lock-Up Agreements

In connection with this offering, we and each of our directors and executive officers and substantially all of our other security holders have agreed that, without the prior written consent of BofA Securities, Inc., Citigroup Global Markets Inc., and SVB Leerink LLC, on behalf of the underwriters, we and they will not, subject to limited exceptions, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, shares of our common stock or any securities convertible into or exchangeable for shares of our common stock whether now owned or hereafter acquired or with respect to which such holder has or acquires the power of disposition, of the lock-up securities;

- enter into any swap or other agreement or transaction that transfers to another, in whole or in part, directly or indirectly, any of the economic consequences of ownership of the lock-up Securities, whether any such swap or transaction is to be settled by delivery of our common stock or such other securities, in cash or otherwise; or

- publicly disclose the intention to do any of the foregoing.

Each of our directors and executive officers and the holders of substantially all of our outstanding stock and stock options have also agreed during such 180-day period not to make any demand for, or exercise any right with respect to, or confidentially submit or cause to be filed or confidentially submitted any registration statement under the Securities Act with respect to, the registration of shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock, or warrants or other rights to purchase shares of our common stock or any such securities.

Upon the expiration of the 180-day lock-up period, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above. For a further description of these lock-up agreements, see “Underwriting.”

Equity Plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of our common stock subject to outstanding options and shares of our common stock reserved for issuance under the 2012 Plan, the 2013 Plan, the 2021 Plan, and the 2021 ESPP. We expect to file the registration statement covering these shares shortly after the date of this prospectus. The registration statement will be effective immediately upon filing and will permit the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market, subject to compliance with the resale provisions of Rule 144 and the lock-up agreements described above, if applicable. For a more complete discussion of our stock plans, see “Executive and Director Compensation—Equity Incentive Plans.”

Registration Rights

Upon the closing of this offering, the holders of 14,430,522 shares of our common stock (including shares of our common stock issuable upon the conversion of all outstanding shares of our convertible preferred stock) or certain of their transferees will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See “Description of Capital Stock—Registration Rights” for additional information. Shares covered by a registration statement will be eligible for sale in the public market upon the expiration or release from the terms of the lock-up agreement.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a general discussion of the material U.S. federal income tax consequences applicable to non-U.S. holders (as defined below) with respect to the acquisition, ownership, and disposition of our common stock, but does not purport to be a complete analysis of all the potential U.S. federal income tax considerations relating thereto. In addition, this discussion does not describe any state, local, or non-U.S. income, estate, gift, or other tax consequences of acquiring, holding, and disposing of our common stock. This discussion is based upon the applicable provisions of the Internal Revenue Code of 1986, as amended, which we refer to as the Tax Code, applicable U.S. Treasury regulations promulgated thereunder, or the Treasury Regulations, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, all as of the date hereof. These authorities may change or be subject to differing interpretations, possibly on a retroactive basis. Any such changes could alter the tax consequences to non-U.S. holders described below. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences to a non-U.S. holder of the purchase, ownership, and disposition of our common stock.

This discussion is limited to non-U.S. holders who purchase our common stock offered by this prospectus and who hold our common stock as a "capital asset" within the meaning of Section 1221 of the Tax Code (generally, property held for investment). This discussion does not address all of the potential U.S. federal income tax consequences applicable to a non-U.S. holder's particular circumstances, including the impact of the 3.8% Medicare contribution tax on net investment income or the alternative minimum tax. In addition, this discussion does not address the U.S. federal income tax consequences applicable to non-U.S. holders that are subject to special rules, including:

- U.S. expatriates, former citizens, or former long-term residents of the United States;
- banks, insurance companies, or other financial institutions;
- real estate investment trusts or regulated investment companies;
- "controlled foreign corporations," "passive foreign investment companies," or corporations that accumulate earnings to avoid U.S. federal income tax;
- brokers, dealers, or traders in securities, commodities, or currencies;
- persons who have elected to use a mark-to-market method of accounting for their securities holdings;
- partnerships or other entities or arrangements treated as partnerships, pass-throughs, or disregarded entities for U.S. federal income tax purposes (or investors in such entities), S corporations or other pass-through entities (including hybrids);
- tax-exempt organizations, governmental organizations, or tax-qualified retirement plans;
- persons deemed to sell our common stock under the constructive sale provisions of the Tax Code;
- persons who acquired our common stock pursuant to the exercise of any employee stock option or otherwise as compensation or through a qualified retirement plan;
- persons who acquired our common stock pursuant to the exercise of warrants or conversion rights under convertible instruments;

- persons who hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security, other integrated investment, or other risk reduction strategy;
- "qualified foreign pension funds" as defined in Section 897(l)(2) of the Tax Code and entities all of the interests of which are held by qualified foreign pension funds; and
- persons that own, or have owned, actually or constructively, more than 5% of our common stock.

In addition, if a partnership, including any entity or arrangement classified as a partnership for U.S. federal income tax purposes, holds our common stock, the U.S. federal income tax treatment of a partner in the partnership generally will depend on the status of the partner, the activities of the partnership, and certain determinations made at the partner level. Accordingly, partnerships that hold our common stock, and partners in such partnerships, should consult their tax advisors regarding the U.S. federal income tax consequences to them of the acquisition, ownership, and disposition of our common stock.

THE FOLLOWING DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE INVESTORS ARE URGED TO CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING, AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, OR NON-U.S. TAX LAWS, OR UNDER ANY U.S. FEDERAL NON-INCOME TAX LAWS, OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of Non-U.S. Holder

As used in this discussion, the term "non-U.S. holder" means any beneficial owner of our common stock that is, for U.S. federal income tax purposes, neither a "U.S. person" nor a partnership (nor any other entity that is treated as a partnership for U.S. federal income tax purposes). A "U.S. person" is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a U.S. court and the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Tax Code) or (ii) has a valid election in effect under applicable Treasury Regulations to be treated as a United States person for U.S. federal income tax purposes.

Distributions of Our Common Stock

As described in the section of this prospectus entitled "Dividend Policy," we have not paid and we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we make distributions of cash or property on our common stock, such distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated first as a tax-free return of capital that reduces a non-U.S. holder's adjusted basis in such holder's common stock, but not below zero. Any excess will be treated as gain realized on the sale or other disposition of our common stock and will be treated as described under the section titled "—Sale, Exchange or Other Disposition of Our Common Stock," below.

Subject to the discussions below regarding effectively connected income, backup withholding, and FATCA (as hereinafter defined), dividends paid to a non-U.S. holder of our common stock generally will be subject to U.S. federal withholding tax at a rate of 30%, or such lower rate specified by an applicable income tax treaty, if any. To receive the benefit of a reduced treaty rate, a non-U.S. holder must furnish us or the applicable withholding agent with a valid IRS Form W-8BEN or IRS Form W-8BEN-E (or applicable successor form) certifying such holder's qualification for the reduced withholding rate. This certification must be provided to us or the applicable withholding agent before the payment of dividends and must be updated periodically. If a non-U.S. holder holds the stock through a financial institution or other intermediary, the non-U.S. holder will be required to provide appropriate documentation to the intermediary, which will then be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. A non-U.S. holder that does not timely furnish the required documentation, but qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty and the specific manner of claiming the benefits of such treaty.

If a non-U.S. holder holds our common stock in connection with the non-U.S. holder's conduct of a trade or business within the United States, and dividends paid on our common stock are effectively connected with such non-U.S. holder's U.S. trade or business (and, if required by an applicable treaty, the non-U.S. holder maintains a permanent establishment within the United States to which such dividends are attributable), such non-U.S. holder generally will be exempt from the U.S. federal withholding tax described above, and instead will be subject to U.S. federal income tax at ordinary U.S. federal income tax rates (which tax is imposed on a net income basis). To claim the exemption from withholding, the non-U.S. holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI (or applicable successor form), certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States. In the case of a non-U.S. holder that is a foreign corporation, such non-U.S. holder may also be subject to a 30% "branch profits tax" on such effectively connected dividend income unless such corporate non-U.S. holder qualifies for a lower rate under an applicable income tax treaty. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Sale, Exchange, or Other Disposition of Our Common Stock

Subject to the discussions below regarding backup withholding and FATCA, a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale, exchange, or other disposition, which we collectively refer to as a disposition, of our common stock, unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business within the United States, and if an income tax treaty applies, is attributable to a permanent establishment maintained by the non-U.S. holder within the United States;
- the non-U.S. holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest, or USRPI, as defined in the Tax Code, by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding such disposition or such non-U.S. holder's holding period for the relevant shares of our common stock. Generally, a corporation is a USRPHC only if the fair market value of its USRPIs equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business.

If the gain is described in the first bullet point above, the non-U.S. holder generally will be subject to U.S. federal income tax on a net income basis at regular rates with respect to such gain in the same manner as if such non-U.S. holder were a U.S. person. In addition, if the non-U.S. holder is a corporation for U.S. federal income tax purposes, it may also be subject to a 30% branch profits tax (or such lower rate specified by an applicable treaty) on such effectively connected gain, as adjusted for certain items.

A non-U.S. holder described in the second bullet point above generally will be subject to U.S. federal income tax with respect to such gain at a flat 30% rate (or such lower rate specified by an applicable income tax treaty), which may be offset by certain U.S. source capital losses of the non-U.S. holder during the taxable year of disposition (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and we do not anticipate that we will become, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our other business assets and our non-U.S. real property interests, there can be no assurance that we will not become a USRPHC in the future. Even if we were to become a USRPHC, a non-U.S. holder would not be subject to U.S. federal income tax on a disposition of our common stock by reason of our status as a USRPHC so long as (i) shares of our common stock are "regularly traded" on an "established securities market" (as defined by applicable Treasury Regulations) during the calendar year in which such disposition occurs and (ii) such non-U.S. holder does not own and is not deemed to own (directly, indirectly or constructively) more than 5% of our outstanding common stock at any time during the shorter of the five-year period ending on the date of the disposition of our common stock by the non-U.S. holder or the non-U.S. holder's holding period for our common stock.

Non-U.S. holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Backup Withholding and Information Reporting

Backup withholding, currently at a rate of 24%, generally will not apply to dividends paid to a non-U.S. holder on, or to the gross proceeds paid to a non-U.S. holder from a disposition of, our common stock, provided that the non-U.S. holder furnishes the required certification for its non-U.S. status, such as by providing a valid IRS Form W-8BEN, IRS Form W-8BEN-E, IRS Form W-8ECI, or certain other requirements are met. Backup withholding may apply if the payor has actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

We are required to report annually to the IRS the amount of any dividends paid to a non-U.S. holder, regardless of whether we actually withheld any tax. Copies of the information returns reporting such dividends and the amount withheld may also be made available to the tax authorities in the country in which the non-U.S. holder resides under the provisions of an income tax treaty or other agreement between the United States and the tax authorities in such country. In addition, proceeds from the disposition by a non-U.S. holder of our common stock that is transacted within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Backup withholding is not an additional tax. The U.S. income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If backup withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Tax Code (such sections are commonly referred to as the Foreign Account Tax Compliance Act, or FATCA) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends paid to a non-U.S. holder on, or subject to the proposed Treasury Regulations discussed below, gross proceeds from the disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Tax Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Tax Code) or furnishes identifying information regarding each substantial United States owner, or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in clause (i) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States owned foreign entities" (each as defined in the Tax Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our common stock. While withholding under FATCA would also have applied to payments of gross proceeds from the disposition of stock on or after January 1, 2019, proposed Treasury Regulations released on December 13, 2018 provide for the elimination of FATCA withholding on payments of gross proceeds entirely. In its preamble to the Proposed Regulations, the U.S. Treasury Department stated that taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to an investment in our common stock.

UNDERWRITING

BofA Securities, Inc., Citigroup Global Markets Inc., and SVB Leerink LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
BofA Securities, Inc.	
Citigroup Global Markets Inc.	
SVB Leerink LLC	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as, and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel, or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession, or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount, and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to us	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $ and are payable by us. We have also agreed to reimburse the underwriters for their expenses relating to clearance of this offering with the Financial Industry Regulatory Authority in an amount up to $.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers, and directors and substantially all of our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of BofA Securities, Inc., Citigroup Global Markets Inc., and SVB Leerink LLC. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, sell, or contract to sell any common stock;
- sell any option or contract to purchase any common stock;
- purchase any option or contract to sell any common stock;
- grant any option, right, or warrant for the sale of any common stock;
- lend or otherwise dispose of or transfer any common stock;
- request or demand that we file or make a confidential submission of a registration statement related to the common stock;
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash, or otherwise; or
- publicly disclose the intention to do any of the foregoing.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Nasdaq Global Select Market Listing

We expect the shares to be approved for listing on the Nasdaq Global Select Market, subject to notice of issuance, under the symbol "CRBU."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us;
- our financial information;

- the history of, and the prospects for, our company and the industry in which we compete;
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues;
- the present state of our development; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions, and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix, or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales, and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Select Market, in the over-the-counter market, or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area, or each, a Relevant State, no Shares have been offered or will be offered pursuant to this offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

a. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

c. in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require the Company or any representative to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Relevant State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged, and agreed to and with the Company and the representatives that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged, and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Relevant State to qualified investors, in circumstances in which the prior consent of the representatives have been obtained to each such proposed offer or resale.

The Company, the underwriters, and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements, and agreements.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

The above selling restriction is in addition to any other selling restrictions set out below.

In connection with the offering, the underwriters are not acting for anyone other than the Company and will not be responsible to anyone other than the Company for providing the protections afforded to their clients nor for providing advice in relation to the offering.

Notice to Prospective Investors in the United Kingdom

In relation to the United Kingdom, or the UK, no shares have been offered or will be offered pursuant to this offering to the public in the UK prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority in the UK in accordance with the UK Prospectus Regulation and the FSMA, except that offers of shares may be made to the public in the UK at any time under the following exemptions under the UK Prospectus Regulation and the FSMA:

a. to any legal entity which is a qualified investor as defined under the UK Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

c. at any time in other circumstances falling within section 86 of the FSMA,

provided that no such offer of shares shall require the Company or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

Each person in the UK who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged, and agreed to and with the Company and the representatives that it is a qualified investor within the meaning of the UK Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the UK Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged, and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in the UK to qualified investors, in circumstances in which the prior consent of the representatives have been obtained to each such proposed offer or resale.

The Company, the underwriters, and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements, and agreements.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in the UK means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, the

expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018, and the expression “FSMA” means the Financial Services and Markets Act 2000.

In connection with the offering, the underwriters are not acting for anyone other than the Company and will not be responsible to anyone other than the Company for providing the protections afforded to their clients nor for providing advice in relation to the offering.

This document is for distribution only to persons who (i) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Financial Promotion Order, (ii) are persons falling within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc.”) of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended, or the FSMA) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, or the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority, or FINMA, and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or the DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement, or other disclosure document has been lodged with the Australian Securities and Investments Commission, or the ASIC, in relation to the offering.

This prospectus does not constitute a prospectus, product disclosure statement, or other disclosure document under the Corporations Act 2001, or the Corporations Act, and does not purport to include the information required for a prospectus, product disclosure statement, or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons, or the Exempt Investors, who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation, or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives, and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation, or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations, and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the shares were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or caused to be made the subject of an invitation for subscription or

purchase, and this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time, or the SFA) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

a. a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

b. a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

(i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(ii) where no consideration is or will be given for the transfer;

(iii) where the transfer is by operation of law; or

(iv) as specified in Section 276(7) of the SFA.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts*, or NI 33-105, the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Reed Smith LLP, Los Angeles, California, and New York, New York. Certain legal matters will be passed upon for the underwriters by Shearman & Sterling LLP, New York, New York.

EXPERTS

The financial statements as of December 31, 2019 and 2020 and for each of the two years in the period ended December 31, 2020 included in this Registration Statement have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein. Such financial statements are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock offered hereby. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to the Company and its common stock, reference is made to the registration statement and the exhibits and any schedules filed therewith. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance, if such contract or document is filed as an exhibit, reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each statement being qualified in all respects by such reference. The SEC maintains a website at *www.sec.gov*, from which interested persons can electronically access the registration statement, including the exhibits and any schedules thereto. The information on the SEC's website is not part of this prospectus, and any references to this website or any other website are inactive textual references only.

As a result of the offering, we will become subject to the information and reporting requirements of the Exchange Act and we will be required to file periodic reports and other information with the SEC. These periodic reports and other information will be available on the SEC's website referred to above. We also maintain a website at *www.caribou bio.com*, at which, following this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. Our website and the information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part. We have included our website address as an inactive textual reference only.

CARIBOU BIOSCIENCES, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Caribou Biosciences, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Caribou Biosciences, Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2020, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' equity (deficit), and cash flows, for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2020, and the results of its operations and its cash flows for the each of the two years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

San Francisco, CA
May 7, 2021

We have served as the Company's auditor since 2016.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2019 AND 2020
(in thousands, except share and per share amounts)

	2019	2020
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$41,070	$ 15,953
Accounts receivable	5	150
Contract assets ($0 and $250 from related party, respectively)	836	1,328
Other receivables	3,141	3,682
Investment in equity securities	8,401	—
Prepaid expenses and other current assets	3,555	3,193
Total current assets	57,008	24,306
INVESTMENTS IN EQUITY SECURITIES, LONG-TERM	—	7,626
PROPERTY AND EQUIPMENT—NET	4,332	3,502
OTHER ASSETS, LONG-TERM	593	612
TOTAL ASSETS	$61,933	$ 36,046
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)		
CURRENT LIABILITIES:		
Accounts payable ($0 and $500 to related party, respectively)	$ 2,537	$ 2,601
Accrued expenses and other current liabilities	6,824	8,973
Promissory note—PPP loan	—	654
Deferred revenue, current portion	717	161
Total current liabilities	10,078	12,389
LONG-TERM LIABILITIES:		
Deferred revenue, net of current portion ($0 and $50 from related party, respectively)	986	937
Deferred rent and lease incentive liability	900	925
Promissory note—PPP loan, net of current portion	—	924
Success payments liability	—	2,654
Other liabilities	533	176
Deferred tax liabilities	650	155
Total liabilities	13,147	18,160
COMMITMENTS AND CONTINGENCIES (Note 9)	—	—
CONVERTIBLE PREFERRED STOCK, par value $0.0001 per share—7,766,582 shares authorized at December 31, 2019 and 2020; 7,766,582 shares issued and outstanding at December 31, 2019 and 2020; (liquidation preference of $41,620 at December 31, 2019 and 2020)	41,323	41,323
STOCKHOLDERS' EQUITY (DEFICIT):		
Common stock, par value $0.0001 per share—15,544,106 and 15,914,951 shares authorized at December 31, 2019 and 2020, respectively; 4,862,054 and 5,341,498 shares issued and outstanding at December 31, 2019 and 2020, respectively	1	1
Additional paid-in capital	4,025	7,433
Retained earnings (accumulated deficit)	3,437	(30,871)
Total stockholders' equity (deficit)	7,463	(23,437)
TOTAL LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)	$61,933	$ 36,046

See accompanying notes to consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2020
(in thousands, except share and per share amounts)

	2019	2020
Licensing and collaboration revenue ($0 and $7,250 from related party, respectively)	$ 5,788	$ 12,361
Operating expenses:		
Research and development	23,635	34,425
General and administrative	16,458	14,060
Total operating expenses	40,093	48,485
Loss from operations	(34,305)	(36,124)
Other income (expense):		
Interest income	1,047	236
Interest expense	(4)	(20)
Change in fair value of equity securities	2,294	(733)
Other income	—	514
Total other income (expense)	3,337	(3)
Net loss before provision for income taxes	(30,968)	(36,127)
Benefit from income taxes	(7,537)	(1,819)
Net loss and comprehensive loss	$ (23,431)	$ (34,308)
Net loss per share, basic and diluted	$ (5.09)	$ (7.30)
Weighted-average common shares outstanding, basic and diluted	4,606,536	4,701,183

See accompanying notes to consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2020
(in thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Retained Earnings (Accumulated Deficit)	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
BALANCE—December 31, 2018	7,766,582	$ 41,323	4,788,327	$ 1	$ 2,574	$ 27,372	$ 29,947
Retroactive adjustment to beginning retained earnings for adoption of ASC 606 (Note 2)	—	—	—	—	—	(504)	(504)
Issuance of common stock on exercise of options	—	—	73,727	—	217	—	217
Stock-based compensation expense	—	—	—	—	1,234	—	1,234
Net loss and comprehensive loss	—	—	—	—	—	(23,431)	(23,431)
BALANCE—December 31, 2019	7,766,582	$ 41,323	4,862,054	$ 1	$ 4,025	$ 3,437	$ 7,463
Issuance of common stock to acquire in-process research and development (see Note 4)	—	—	370,845	—	2,136	—	2,136
Issuance of common stock on exercise of options	—	—	108,599	—	270	—	270
Stock-based compensation expense	—	—	—	—	1,002	—	1,002
Net loss and comprehensive loss	—	—	—	—	—	(34,308)	(34,308)
BALANCE—December 31, 2020	7,766,582	$ 41,323	5,341,498	$ 1	$ 7,433	$ (30,871)	$ (23,437)

See accompanying notes to consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2020
(in thousands)

	2019	2020
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(23,431)	$(34,308)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	751	900
Loss on disposal of fixed assets	1	70
Change in fair value of equity securities	(2,294)	733
Non-cash consideration for licensing and collaboration revenue (Note 4) ($0 and $7,500 from related party, respectively)	—	(7,577)
Stock-based compensation expense	1,234	1,002
Fair value of success payments liability	—	2,654
Acquired in-process research and development (Note 4)	—	3,134
Changes in operating assets and liabilities:		
Accounts receivable	617	(146)
Contract assets	(836)	(492)
Other receivables	(870)	(540)
Prepaid expenses and other current assets	(1,348)	362
Other assets	(298)	(19)
Accounts payable	1,176	43
Accrued expenses and other current liabilities	703	2,291
Deferred revenue, current and long-term	(798)	(605)
Deferred rent and lease incentive liability	75	25
Other liabilities	425	(247)
Deferred tax liabilities	(7,113)	(495)
Net cash used in operating activities	(32,006)	(33,215)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from sale of equity securities	28,117	7,668
Purchases of property and equipment	(884)	(317)
Proceeds from sale of property and equipment	—	10
Cash paid to acquire in-process research and development	—	(998)
Net cash provided by investing activities	27,233	6,363
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from promissory note	—	1,578
Proceeds from common stock options exercised	217	270
Principal payments of capital leases	(45)	(113)
Net cash provided by financing activities	172	1,735
NET DECREASE IN CASH AND CASH EQUIVALENTS	(4,601)	(25,117)
CASH AND CASH EQUIVALENTS—Beginning of year	45,671	41,070
CASH AND CASH EQUIVALENTS—End of year	$ 41,070	$ 15,953
SUPPLEMENTAL CASH FLOW INFORMATION:		
Cash paid for income taxes	$ 1,809	$ 21
SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITES:		
Purchases of property and equipment unpaid at period end	$ 886	$ 15
Capital lease financing for purchase of assets	$ 276	$ —
Issuance of common stock to acquire in-process research and development (Note 4)	$ —	$ 2,136
Shares received as consideration for licensing and collaboration revenue	$ —	$ 7,577

See accompanying notes to consolidated financial statements.

CARIBOU BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2020

1. Description of the Business, Organization, and Liquidity

Business and Organization

Caribou Biosciences, Inc. (the "Company") is a clinical-stage CRISPR genome-editing biotechnology company. The Company is developing an internal pipeline of off-the-shelf CAR-T and CAR-NK cell therapies. It was incorporated in October 2011 as a Delaware corporation and is headquartered in Berkeley, California. The Company has four wholly-owned subsidiaries: Caribou Therapeutics Holdco, LLC, incorporated in Delaware in July 2014 and dissolved in December 2020; Antler Holdco, LLC, incorporated in Delaware in April 2019; Microbe Holdco, LLC, incorporated in Delaware in June 2020; and Arboreal Holdco, LLC, incorporated in Delaware in November 2020. The Company's wholly-owned subsidiaries hold interest in the Company's equity investments and do not have operating activities.

Liquidity

The Company has incurred net operating losses and negative cash flows from operations since its inception and had an accumulated deficit of $30.9 million as of December 31, 2020. During the year ended December 31, 2020, the Company incurred a net loss of $34.3 million and used $33.2 million of cash in operations. As of December 31, 2020, the Company had cash and cash equivalents of $16.0 million. The Company expects to continue to incur substantial losses, and its ability to achieve and sustain profitability will depend on the successful development, approval and commercialization of product candidates and on the achievement of sufficient revenues to support its cost structure. The Company may never achieve profitability, and unless and until it does, the Company will need to continue to raise additional capital. Management expects that existing cash and cash equivalents of $16.0 million; cash received in connection with the issuance of Series C convertible preferred stock shares with approximate proceeds of $108.8 million, net of issuance costs of $6.2 million, in March 2021 (Note 16); and an upfront cash payment for the license and collaboration agreement with AbbVie of $30.0 million in March 2021 (Note 16) will be sufficient to fund its current operating plan for at least the next 12 months from the date of issuance of these consolidated financial statements.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) and include the accounts of Caribou Biosciences, Inc. and its wholly-owned subsidiaries. All intercompany transactions are eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue, income and expenses during the reporting period. On an ongoing basis, the Company evaluates its estimates and assumptions, including those related to revenue recognition, common stock valuation, stock-based compensation expense, accrued expenses related to research and development activities, valuation of success payments liability and income taxes. Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Segments

The Company operates and manages its business as one reportable and operating segment, which is the business of developing an internal pipeline of off-the-shelf CAR-T and CAR-NK cell therapies. The Company's chief executive officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for allocating and evaluating financial performance. All long-lived assets are maintained in the United States of America.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. As of December 31, 2019 and 2020, cash and cash equivalents consisted of cash and money market mutual funds.

Concentrations of Credit Risk and Other Uncertainties

Financial instruments that potentially subject the Company to concentration of credit risk consisted of cash and cash equivalents, accounts receivable, contract assets, other receivables, and investments in equity securities. Substantially all of the Company's cash and cash equivalents are deposited in accounts at one financial institution, and account balances may at times exceed federally insured limits. The Company believes the financial institution to be of high credit quality.

Licensees who represent 10% or more of the Company's revenues and accounts receivable and contract assets are as follows:

	Revenue		Accounts Receivable and Contract Assets	
	Year Ended December 31,		As of December 31,	
	2019	2020	2019	2020
Licensee A	38.9%	*	*	*
Licensee B	26.1%	14.5%	63.7%	40.6%
Licensee C	10.6%	*	*	*
Licensee D, related party	*	60.7%	*	*
Licensee E	*	*	18.0%	13.2%
Licensee F, related party	*	*	*	16.9%
Licensee G	*	*	*	10.1%
Total	75.6%	75.2%	81.7%	80.8%

* Less than 10%

The Company monitors economic conditions to identify facts or circumstances that may indicate that any of its accounts receivable are not collectible and if the contract assets should be impaired. No allowance for doubtful accounts was recorded at December 31, 2019 and 2020.

The Company is subject to certain risks and uncertainties including, but not limited to, changes in any of the following areas that the Company believes could have a material adverse effect on its future financial position or results of operations: availability of future financing; ability to obtain and maintain intellectual property; defending against patent litigation brought by third parties; public perception and acceptance of genome editing; negotiation of future licensing agreements and enforceability of existing contractual obligations; disputes with licensors or licensees; reliance on third parties for manufacturing of product candidates; outcomes of clinical trials; ability to obtain regulatory approval and market acceptance of the Company's product candidates; introduction of competitive products; and the Company's ability to attract and retain qualified employees necessary to support clinical and commercial success.

Revenue Recognition

The Company determines whether agreements are within the scope of ASC 606 or other topics at an agreement's effective date. For agreements that are determined to be within the scope of ASC 606, revenue is recognized when a customer, or licensee, obtains control of promised goods or services (*e.g.*, an intellectual property license). The amount of revenue recognized reflects the consideration that the Company expects to be entitled to receive in exchange for these goods and services. To achieve this core principle, the Company applies the following five steps (i) identify the contract with the customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as the Company satisfies a performance obligation.

The Company's revenues are primarily derived through its licensing and/or collaboration agreements. The terms of these types of agreements may include (i) licenses for the Company's technology or programs, (ii) research and development services and (iii) services or obligations in connection with the Company's participation in research or steering committees. Payments to the Company under these arrangements typically include one or more of the following: nonrefundable upfront license fees, maintenance fees, milestones, and other contingent payments to the Company for the achievement of defined collaboration objectives and certain preclinical, clinical, regulatory, and sales-based events, as well as royalties on sales of any commercialized products.

The Company assesses whether the promises in its arrangements with customers are considered distinct performance obligations that should be accounted for separately. Judgment is required to determine whether the license to the Company's intellectual property is distinct from the research and development services or participation on steering committees.

If the license to intellectual property controlled by the Company is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues allocated to the license at the point in time when the license is transferred to the licensee and the licensee is able to use and benefit from the licenses. For licenses that are combined with other promises, the Company utilizes its judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress using the input method for each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

The Company's license and/or collaboration agreements may include contingent milestone payments. Such milestone payments are typically payable when the collaboration partner or licensee achieves certain predetermined clinical, regulatory, and/or commercial milestones. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. At each reporting date, the Company re-evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price by using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price in such period of determination.

The Company's collaboration and license agreements may also include contingent payments related to sales-based milestones. Sales-based milestones are typically payable when annual sales of a covered product reach specified levels. Sales-based milestones are recognized at the later of when the associated performance obligation has been satisfied or when the sales occur. Unlike other contingency payments, such as regulatory milestones, sales-based milestones are not included in the transaction price based on estimates at the inception of the contract, but rather, are included when the sales or usage occur. The Company is using the sales-based royalty exception because the license is a predominant item to which sales-based royalties relate.

Certain of the Company's license agreements have two performance obligations: a license and a material right for annual license renewals. Such license agreements require payments of non-refundable annual license fees by the licensee (referred to as maintenance fees in the license agreements), which are accounted for

as material rights for license renewals. The Company recognizes revenue when the license is delivered and the term commences. Revenue for the material right for license renewals is recognized at the point in time the annual license fee is paid by the licensee and the renewal period begins.

Customer payments are recorded as deferred revenue upon receipt or when due and may require deferral of revenue recognition to a future period until the Company satisfies its performance obligations under these arrangements. Amounts payable to the Company are recorded as accounts receivable if invoiced or as contract assets, when the Company's right to consideration is unconditional.

Property and Equipment

Property and equipment are recorded at cost, net of accumulated depreciation. Depreciation is recorded using the straight-line method over the estimated useful lives of the assets, generally three to ten years. Leasehold improvements are capitalized and amortized over the shorter period, expected life or lease term. Major replacements and improvements are capitalized, while general repairs and maintenance are expensed as incurred.

Upon retirement or sale of the assets, the cost and related accumulated depreciation and amortization are removed from the consolidated balance sheets and the resulting gain or loss are recorded in the consolidated statements of operations and comprehensive loss.

Impairment of Long-Lived Assets

The Company evaluates the carrying amount of its long-lived assets whenever events or changes in circumstances indicate that the assets may not be recoverable. An impairment loss is recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition is less than the carrying amount of the asset. To date, there have been no such impairment losses.

Leases

The Company's lease agreements for its laboratory and office facilities are classified as operating leases. Rent expense is recognized on a straight-line basis over the term of the lease. Incentives granted under the Company's facilities leases, including allowances to fund leasehold improvements and rent holidays, are recorded to a deferred rent and lease incentive liability and are recognized as reductions to rental expense on a straight-line basis over the term of the leases.

Lease agreements that contain a bargain purchase option, a full transfer of ownership at the completion of the lease term, a lease term that is at least 75% of the useful lives of the assets or present value of payments in excess of 90% of fair market value of the leased asset are accounted for as capital leases. The Company capitalizes capital leases in property and equipment and the related amortization of assets under capital leases is included in depreciation and amortization expense in the Company's consolidated statements of operations and comprehensive loss. Initial asset values and lease obligations are based on the present value of future minimum lease payments.

Deferred Issuance Costs

Issuance costs, consisting of legal, accounting, audit and filing fees relating to in-process equity financings, including the Company's proposed initial public offering ("IPO"), are capitalized. Deferred issuance costs are offset against offering proceeds upon the completion of an equity financing or an offering. In the event an equity financing or an offering is terminated or delayed, deferred issuance costs will be expensed immediately as a charge to general and administrative expenses in the consolidated statements of operations and comprehensive loss. As of December 31, 2019 and 2020, the Company did not capitalize any issuance costs.

Convertible Preferred Stock

The Company records convertible preferred stock at fair value on the dates of issuance, net of issuance costs. The convertible preferred stock is recorded outside of stockholders' equity (deficit) because the preferred

shares contain liquidation features outside of the Company's control. The Company has elected not to adjust the carrying values of the convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a liquidation event will occur.

Research and Development Expenses and Accrued Liabilities

Research and development expenses are charged to expense as incurred. Research and development expenses include certain payroll and personnel expenses; laboratory supplies; consulting costs; external clinical research and development expenses; and allocated overhead, including rent, equipment depreciation and utilities.

The Company records accrued liabilities for estimated costs of its research and development activities conducted by third-party service providers. The Company records the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced and includes these costs in accrued liabilities in the consolidated balance sheets and within research and development expenses in the consolidated statements of operations and comprehensive loss. The Company accrues for these costs based on factors such as estimates of the work completed and in accordance with service agreements established with third parties. If the Company does not identify costs that have begun to be incurred or if it underestimates or overestimates the level of services performed or the costs of these services, actual expenses could differ from our estimates. To date, the Company has not experienced any material differences between accrued costs and actual costs incurred.

The Company makes payments in connection with clinical trials to CMOs that manufacture the material for the Company's product candidates and to clinical research organizations and clinical trial sites that conduct and manage the clinical trials. The financial terms of these contracts are subject to negotiation, which vary by contract and may result in payments that do not match the periods over which materials or services are provided. Generally, these agreements set forth the scope of work to be performed at a fixed fee, unit price or on a time and materials basis. In the event the Company makes advance payments for goods or services that will be used or rendered for future research and development activities, the payments are deferred and capitalized as a prepaid expense and recognized as expense as the goods are received or the related services are rendered. Such payments are evaluated for current or long-term classification based on when they are expected to be realized.

Acquisition of In-Process Research and Development Assets

The Company measures and recognizes acquired in-process research and development assets at cost, including transaction fees, and represents licenses, know-how, and patents at cost. Goodwill is not recognized in asset acquisitions. If acquired in-process technology is determined to not have an alternative future use, the cost is charged to research and development expenses at the acquisition date.

Patent Costs

The Company expenses costs for filing, prosecuting, and maintaining patents and patent applications, including certain of the patents and patent applications that the Company licenses from third parties, as incurred and classifies such costs as general and administrative expenses in the consolidated statements of operations and comprehensive loss. In addition, the Company is entitled to receive reimbursement of a portion of the prosecution and maintenance costs for certain patents and patent applications from third parties. The Company accrues for these reimbursements as the respective expenses are incurred and classifies such reimbursements as a reduction of general and administrative expenses. During the years ended December 31, 2019 and 2020, the Company incurred gross patent costs of $8.5 million and $11.2 million, respectively. During the years ended December 31, 2019 and 2020, the Company recorded $4.4 million and $5.8 million, respectively, of patent reimbursements as a credit to general and administrative expense.

Other Income

The Company recognizes fees earned from sources not considered to be within the normal course of business in other income within the consolidated statements of operations and comprehensive loss. During the year ended December 31, 2020, the Company recognized $0.5 million of fees related to the Company's sale and assignment of patents and patent applications, which is not an ordinary business activity.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Refer to Note 3, *Fair Value Measurements and Fair Value of Financial Instruments*, for the methodologies and assumptions used in valuing financial instruments.

Success Payments Liability

Under the terms of the Company's Exclusive License Agreement with Memorial Sloan Kettering Cancer Center ("MSKCC") (Note 4), the Company may be required to make success payments and a change of control payment if its stock price increases by certain multiples of increasing value based on a comparison of the fair market value of its common stock upon such transaction with $9.4379 per share, the price at which the Company's Series B convertible preferred stock was sold, adjusted for any stock splits, during a specified time period. The success payments liability is accounted for under ASC 815, *Derivatives and Hedging*. The nature of the success payments liability is contingent consideration for the MSKCC exclusive license and, as such, it is accounted for as research and development expenses. The success payments liability is estimated at fair value at inception, and at each subsequent balance sheet date, and changes in the fair value of the success payments liability are included in operating expenses in the Company's consolidated statements of operations and comprehensive loss.

To determine the estimated fair value of the success payments liability, the Company uses a Monte Carlo simulation methodology which models the future movement of stock prices based on several key variables. The following variables were incorporated in the estimated fair value of the success payments liability: estimated term of the success payments, fair value of common stock, expected volatility, risk-free interest rate, and estimated number and timing of valuation measurement dates on the basis of which payments may be triggered. The computation of expected volatility was estimated using a combination of available information about the historical volatility of stocks of similar publicly traded companies for a period matching the expected term assumption and its historical and projected volatility. There are several valuation measurement dates subsequent to an IPO, on the basis of which payments may be triggered (Note 4).

Investments in Equity Securities

The Company invests in, or receives as consideration for revenue contracts with customers, equity securities of private or public companies. If the Company determines that it has control over these companies, it consolidates the financial statements of the investees. If the Company determines that it does have control over these investees under either the VIE or voting models, it then determines if it has an ability to exercise significant influence via voting interests, board representation or other business relationships. If the Company concludes that it does not have an ability to exercise significant influence over an investee, it accounts for its investment at fair value and may elect to account for an equity security without a readily determinable fair value using a measurement alternative. This measurement alternative allows the Company to measure the equity investment at its cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.

The investment in equity securities, included in the current assets, consisted of common stock shares of Intellia Therapeutics, Inc. ("Intellia") as of December 31, 2019. Intellia shares are publicly traded and are accounted for at fair value, which is Intellia's closing price of common stock on Nasdaq at the end of each reporting period. The Company recognized changes in fair value of equity securities in other income (expense) in its consolidated statements of operations and comprehensive loss until the securities were sold. The Company sold Intellia shares during 2019 and 2020 for $28.1 million and $7.7 million of cash proceeds, respectively, and recognized change in fair value of equity securities of $2.3 million and $0.7 million, respectively, in its consolidated statements of operations and comprehensive loss, respectively.

Investments in equity securities, long-term, consisted primarily of the Company's investment in the preferred stock of a private company, a related party (Note 7). The Company concluded that its shares of the private company's preferred stock are not in substance common stock and, since these securities do not have readily determinable fair value, the Company accounts for its investment in the private company's preferred stock using the alternative measurement method.

The Company recorded $0.6 million as other receivables relating to securities sold that had not been settled in cash as of December 31, 2019. No such receivable was recorded as of December 31, 2020.

Stock-Based Compensation Expense

Stock-based compensation expense related to awards to employees is measured at the grant date based on the fair value of the award. The fair value of the award that is ultimately expected to vest is recognized as expense on a straight-line basis over the requisite service period of the awards, which is generally the vesting period, and is adjusted for pre-vesting forfeitures in the period in which the forfeitures occur.

The Company uses the Black-Scholes valuation model as the method for determining the estimated fair value of stock-based awards.

Fair Value of Common Stock

The fair value of the Company's common stock is determined by the Board of Directors with assistance from management and external valuation experts. The Company's approach to estimate the fair value of the Company's common stock is consistent with the methods outlined in the American Institute of Certified Public Accountants' Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*.

Expected Term

Expected term represents the period that the Company's stock-based awards are expected to be outstanding and is determined using the simplified method.

Expected Volatility

Expected volatility is estimated by studying the volatility of comparable public companies for similar terms.

Expected Dividend

The Black-Scholes valuation model calls for a single expected dividend yield as an input. To date, the Company has not declared or paid any dividends.

Risk-Free Interest Rate

The risk-free interest rate is based on the U.S. Treasury zero-coupon issued in effect at the time of grant for periods corresponding with the expected term of the option.

Stock-based compensation expense related to awards to non-employees, such as consultants, is recognized based on the then-current fair value at each grant date over the associated service period of the award, which is generally the vesting term, using the straight-line method. The fair value of non-employee stock options is estimated using the Black-Scholes valuation model with assumptions generally consistent with those used for employee stock options, with the exception of the expected term, which is the remaining contractual life at each measurement date.

Income Taxes

The Company accounts for income taxes using the asset and liability method. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the consolidated financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Tax benefits related to uncertain tax positions are recognized when it is more likely than not that a tax position will be sustained during an audit. Interest and penalties related to unrecognized tax benefits are included within the provision for income tax.

Comprehensive Loss

Comprehensive loss includes all changes in equity (net assets) during a period from non-owner sources. There have been no items qualifying as other comprehensive loss and, therefore, for all periods presented, the Company's comprehensive loss was the same as its reported net loss.

Net Loss Per Share

The Company calculates basic and diluted net loss per share using the two-class method since the Company has participating securities. Under the two-class method, basic net loss per share is computed by dividing the net loss by the weighted average number of common shares outstanding during the period, without consideration of potential dilutive securities. Diluted net loss per share is computed by dividing the net loss by the sum of the weighted average number of common shares outstanding during the period plus the dilutive effects of potentially dilutive securities outstanding during the period. Potentially dilutive securities include convertible preferred shares, common stock options, and common shares subject to nonrecourse notes. For all periods presented, diluted net loss per share is the same as basic net loss per share since the effect of including potential common shares is anti-dilutive.

Emerging Growth Company

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

As described in "New Adopted Accounting Pronouncements" below, the Company early adopted multiple accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies to the

extent early adoption is allowed by the accounting standard. The Company expects to use the extended transition period for any other new or revised accounting standards during the period in which it remains an emerging growth company.

Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (FASB) or other standard-setting bodies and adopted by the Company as of the specified effective date.

Newly Adopted Accounting Pronouncements

In May 2014, the FASB issued ASC 606, which superseded existing revenue recognition guidance. ASC 606's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The Company adopted ASC 606 effective on January 1, 2019 using the modified retrospective method. The cumulative effect of applying the new guidance to all contracts that were not completed as of January 1, 2019 was recorded as an adjustment to retained earnings as of the adoption date. As a result of applying the modified retrospective method to adopt the new guidance, the following adjustments were made to accounts on the consolidated balance sheets as of January 1, 2019 (in thousands):

	January 1, 2019		
	Pre-Adoption	ASC 606 Adjustment	Post-Adoption
Current portion of deferred revenue	$ —	$ 66	$ 66
Deferred revenue, net of current portion	1,844	591	2,435
Deferred tax liabilities	7,916	(152)	7,764
Retained earnings	27,372	(505)	26,867

Under ASC 605, the Company accounted for certain upfront payments for licenses with renewal options at a point in time upon delivery of a license to the customer. Under ASC 606, the Company determined that the renewal options for certain customers constitute a material right and, therefore, deferred and amortized upfront payments over the expected renewal term. The amounts within the Company's consolidated statements of operations and comprehensive loss have been revised in the table below to provide a comparison of revenue to the Company's consolidated statements of operations and comprehensive loss for the year ended December 31, 2019 (in thousands):

	Year Ended December 31, 2019 Impact of changes in accounting policies		
	Pre-Adoption	ASC 606 Adjustment	Post-Adoption
Current portion of deferred revenue	$ 594	$ 123	$ 717
Deferred revenue, net of current portion	—	986	986
Deferred tax liabilities	542	108	650
Retained earnings	3,799	(362)	3,437
Licensing and collaboration revenue	6,259	(471)	5,788
Benefit from income taxes	(7,429)	(108)	(7,537)

Effective January 1, 2019, the Company adopted ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*. This ASU affects entities that issue share-based payment awards to their employees. The ASU is designed to simplify several aspects of accounting for share-based payment award transactions that include the income tax consequences, classification of awards as either equity or liabilities, classification on the statements of cash flows and forfeiture rate calculations. As the Company did not have any significant share-based compensation at the time of adoption, the adoption did not have a material impact on its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, *Compensation-Stock Compensation (Topic 718): Improvements to Non-employee Share-Based Payment Accounting*. The updated guidance expands the scope of *Topic 718, Compensation—Stock Compensation* (which currently includes only share-based payments to employees) to include share-based payments issued to non-employees for goods or services. Consequently, the accounting for share-based payments to non-employees and employees will be substantially aligned. ASU 2018-07 supersedes *Subtopic 505-50, Equity—Equity-Based Payments to Non-Employees*. This standard is effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. The Company's adoption of the new standard on January 1, 2019 did not have a material effect on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement—Disclosure Framework (Topic 820)*. The updated guidance requires entities to disclose changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. Amendments in this guidance also require disclosure of transfers into and out of Level 3 of the fair value hierarchy, purchases and issues of Level 3 assets and liabilities, and clarify that the measurement uncertainty disclosure is as of the reporting date. The guidance removes requirements to disclose the amounts and reasons for transfers between Level 1 and Level 2, policy for timing between of transfers between levels, and the valuation processes for Level 3 fair value measurements. The Company has prepared its disclosures for the 2019 and 2020 fiscal years in accordance with this ASU.

Effective January 1, 2019, the Company adopted ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. This ASU clarifies certain transactions between collaborative arrangement participants should be accounted for as revenue when the collaborative arrangement participant is a customer in the context of a unit of account and precludes recognizing as revenue consideration received from a collaborative arrangement participant if the participant is not a customer. The adoption did not have an impact on its consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). The updated guidance in ASU 2019-12 is effective for fiscal years beginning after December 15, 2021, including interim periods therein. Early adoption of the standard is permitted. Effective January 1, 2019, the Company adopted ASU 2019-12, which did not have a material impact to the Company's consolidated financial statements.

New Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This ASU requires a lessee to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-to-use asset representing its right to use the underlying asset for the lease term. The Company may elect not to apply Topic 842 to short-term leases with a term of 12 months or less. This ASU is effective for the Company's fiscal years beginning after December 15, 2021 and interim periods within fiscal years beginning after December 15, 2022, with early adoption permitted. The Company is currently evaluating the impact of adoption of this update on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments (Topic 326)*. The update provides guidance on the measurement of credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. The updated guidance replaces the current incurred loss impairment approach with a methodology to reflect expected credit losses and requires consideration of a broader range of reasonable and supportable information to explain credit loss estimates. This ASU is to be applied on a modified retrospective approach and is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022, and

interim reporting periods within beginning after December 15, 2023. Early adoption is permitted for all entities for fiscal years beginning after December 15, 2018, and interim periods therein. The Company is currently evaluating the impact of adoption of this update on its consolidated financial statements.

3. Fair Value Measurements and Fair Value of Financial Instruments

The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

The Company's financial instruments consisted of Level 1 and Level 3. Level 1 financial instruments are comprised of investment in equity securities in shares of Intellia common stock and money market mutual funds. Level 3 financial instruments are comprised of success payments liability related to the MSKCC Agreement.

The following table sets forth the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands):

	Fair Value Measurements at December 31, 2019			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	$ 41,070	$ 41,070	$ —	$ —
Investments in equity securities	8,401	8,401	—	—
Total	$ 49,471	$ 49,471	$ —	$ —

	Fair Value Measurements at December 31, 2020			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	$ 15,953	$ 15,953	$ —	$ —
Total	$ 15,953	$ 15,953	$ —	$ —
Liabilities:				
Success payments liability	$ 2,654	$ —	$ —	$ 2,654
Total	$ 2,654	$ —	$ —	$ 2,654

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial liability (in thousands):

	Success Payments Liability
Balance at December 31, 2019	$ —
Issuance	2,654
Change in fair value	—
Balance at December 31, 2020	$ 2,654

The fair value of the MSKCC success payments liability at issuance date was $2.7 million and the change in fair value from issuance date to December 31, 2020 was not material to Company's consolidated financial statements.

The initial recognition of $2.7 million of the success payments liability is recorded within the research and development expense caption in the consolidated statement of operations and comprehensive loss during the year ended December 31, 2020.

The Company utilizes a Monte Carlo simulation model that requires significant estimates and assumptions in determining the estimated MSKCC success payments liability and associated expense at each balance sheet date. The assumptions used to calculate the fair value of the success payments are subject to a significant amount of judgment including the expected volatility, estimated term, and estimated number and timing of valuation measurement dates.

The Company's liability for success payments under the MSKCC Agreement is carried at fair value and changes are recognized as expense until the success payments liability is paid or expires (Note 4). To determine the estimated fair value of the success payments liability, the Company uses a Monte Carlo simulation methodology which models the future movement of stock prices based on several key variables. The table below summarizes key assumptions used in the valuation of success payments liability.

	During the Year Ended December 31, 2020
Fair value of common stock	$ 9.93
Risk free interest rate	0.93%
Expected volatility	80%
Probability	4.4% to 13.4%
Expected term (years)	4.7 to 5.7

The computation of expected volatility was estimated using a combination of available information about the historical volatility of stocks of similar publicly traded companies for a period matching the expected term assumption and the Company's historical and implied volatility. The risk-free interest rate, expected volatility, and expected term assumptions depend on the estimated timing of the Company's Phase 1 clinical trials and FDA approval of a future product candidate. In addition, the Company incorporated the estimated number and timing of valuation measurement dates in the calculation of the success payments liability.

A small change in the assumptions and other inputs, such as the fair value of the Company's common stock, may have a relatively large change in the estimated valuation and associated liability and expense.

The carrying value of the promissory note approximates its fair value (see Note 8).

4. Significant Agreements

The Regents of the University of California/University of Vienna

The Company entered into an Exclusive License Agreement, dated April 16, 2013, as amended (the "UC/Vienna Agreement") with The Regents of the University of California ("UC") and the University of Vienna ("Vienna") (together, "UC/Vienna") wherein UC/Vienna granted the Company an exclusive worldwide license, with the right to sublicense, in all fields to the foundational CRISPR-Cas9 patent family co-owned by UC, Vienna, and Dr. Emmanuelle Charpentier (the "CVC IP"). Dr. Charpentier has not granted the Company any rights, either directly or indirectly. The UC/Vienna Agreement continues until the last-to-expire patent or last-to-be-abandoned patent application licensed under the UC/Vienna Agreement; provided, however, that UC/Vienna may terminate the UC/Vienna Agreement upon the occurrence of certain events and the Company may terminate the UC/Vienna Agreement at its sole discretion upon written notice. Without patent term adjustment or patent term extension, the CVC IP will expire in 2033. For products and services sold by the Company covered by the intellectual property licensed under the UC/Vienna Agreement, the Company will owe low to mid-single-digit percent royalties on net sales, subject to a minimum annual royalty. The Company owes UC/Vienna a specified percentage of sublicensing revenue it receives, including cash and equity, under the Company's sublicensing agreements, subject to certain exceptions. If the Company includes intellectual property owned or controlled by it in such sublicense, the Company pays UC/Vienna a low-double-digit percentage of sublicensing revenues. If the Company does not include intellectual property owned or controlled by the Company in such sublicense, the Company pays UC/Vienna 50% of sublicensing revenues. In addition, up to $3.4 million in certain regulatory and clinical milestones may be payable by the Company under the UC/Vienna Agreement in the field of human therapeutics.

For the years ended December 31, 2019 and 2020, the Company paid UC/Vienna $0.8 million in sublicensing fees, which was recorded in research and development expenses in the consolidated statements of operations and comprehensive loss.

The Company is obligated to reimburse UC for prosecution and maintenance costs of the CVC IP. For the years ended December 31, 2019 and 2020, the Company reimbursed UC $6.7 million and $9.2 million, respectively, which were recorded in general and administrative expenses in the consolidated statements of operations and comprehensive loss.

On December 15, 2016, the Company entered into a Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement ("IMA") relating to the CVC IP. Under the IMA, CRISPR Therapeutics AG reimburses the Company 50% of the amounts the Company reimburses UC for patent prosecution and maintenance costs. For the years ended December 31, 2019 and 2020, CRISPR Therapeutics AG reimbursed the Company $3.1 million and $4.2 million, respectively, which was recorded as a reduction of general and administrative expenses in the consolidated statements of operations and comprehensive loss.

Intellia Therapeutics, Inc.

On July 16, 2014, the Company entered into a License Agreement, as amended ("Intellia License Agreement") and a Services Agreement ("Intellia Services Agreement") with Intellia, LLC, to which Intellia is a successor in interest. Under the Intellia License Agreement, the Company granted Intellia an exclusive worldwide license, with the right to sublicense, to certain CRISPR-Cas9 technology for a defined field of human therapeutics. Intellia granted the Company an exclusive worldwide license, with the right to sublicense, to its CRISPR-Cas9 technology for all fields outside of the defined field of human therapeutics, including a license to certain of Intellia's future CRISPR-Cas9 intellectual property until the Company's direct or indirect ownership percentage dropped below 10% (the "IP cut-off date"). Each party had the right to opt-in to any licenses in its field of use entered into by the other party prior to the IP cut-off date, subject to the terms and conditions of such license. The IP cut-off date occurred on January 30, 2018. Under the Intellia License Agreement, each party is

responsible for 30% of the other party's expenses for prosecution and maintenance of the licensed intellectual property. For the years ended December 31, 2019 and 2020, the Company reimbursed Intellia $0.1 million, which was recorded as general and administrative expenses in the consolidated statements of operations and comprehensive loss. During the years ended December 31, 2019 and 2020, Intellia reimbursed the Company $1.2 million and $1.5 million, respectively (including reimbursement for a portion of the patent prosecution and maintenance costs of the CVC IP paid to UC), which was recorded as a reduction of general and administrative expenses in the consolidated statements of operations and comprehensive loss. The term of the Intellia License Agreement continues for the life of the licensed patents and patent applications; provided, however, that either party may terminate upon the occurrence of certain events.

Pioneer Hi-Bred International, Inc. (now Corteva Agriscience)

On July 13, 2015, the Company and Pioneer Hi-Bred International, Inc. ("Pioneer") (now Corteva Agriscience), then a DuPont company ("DuPont"), entered into an Amended and Restated Collaboration and License Agreement, as amended (the "Pioneer Agreement"). Under the terms of the Pioneer Agreement, the Company and Pioneer cross-licensed CRISPR intellectual property portfolios. Pioneer granted the Company an exclusive worldwide license, with the right to sublicense, to its CRISPR intellectual property in the field of research tools, as well as a non-exclusive worldwide license to such intellectual property in human and animal therapeutics, industrial biotechnology, certain agriculture segments, and other fields; and the Company granted Pioneer an exclusive worldwide license, with the right to sublicense, to its CRISPR intellectual property in a defined field of agriculture relating to specified row crops, as well as a non-exclusive worldwide license to such intellectual property in other agricultural applications, industrial biotechnology, nutrition and health and other fields. The Pioneer Agreement continues until the expiration, abandonment or invalidation of the last patent or patent application within the licensed intellectual property; provided, however, that the parties may terminate the Pioneer Agreement by mutual consent or either party may unilaterally terminate the Pioneer Agreement in the event of an uncured breach of a payment obligation, bankruptcy, or failure to maintain or own licensed intellectual property by the other party in the event the non-breaching party is materially adversely affected by such failure. The Company is obligated to pay low-single-digit percent royalties to Pioneer for the sales of the Company's products in the research tools field as well as certain sublicensing revenue in that field. The Company is eligible to receive milestone payments from Pioneer in the event certain regulatory and commercial milestones are met, for a total of up to $22.4 million, related to specified row crops as well as receiving low-single-digit percent royalties for sales of defined agricultural products and certain sublicensing revenue in that field.

Under the Pioneer Agreement, the Company and Pioneer also entered into a three-year collaboration, funded by Pioneer, which ended in 2016. Initially, Pioneer owned the patents and patent applications developed under the collaboration and granted the Company an exclusive license thereto in the fields of research tools and therapeutics. Each party paid 50% of the costs of such patents and patent applications and, for the years ended December 31, 2019 and 2020, the Company spent $0.1 million for filing, prosecuting, and maintaining collaboration intellectual property.

In December 2020, the Company and Pioneer entered into an amendment to the Pioneer Agreement under which Pioneer assigned to the Company the chRDNA patent family developed under the research collaboration, and the Company paid Pioneer an upfront payment of $0.5 million. The Company considered the payment to Pioneer in accordance with revenue recognition guidance and accounted for it as a reduction of the licensing and collaboration revenue within the consolidated statements of operations and comprehensive loss. Following this assignment, the Company is responsible for 100% of the costs of such patents and patent applications.

DuPont made equity investments at fair market value in the Company as part of the Company's Series A, A-1, and B convertible preferred stock financings.

Genus plc

On May 12, 2016, the Company entered into a Research Collaboration and License Agreement, as amended (the "Genus Agreement") with Genus plc ("Genus") under which the Company granted Genus an exclusive worldwide license to certain CRISPR-Cas9 technology for the introduction of genetic traits into cattle and pigs raised to produce protein primarily for human consumption; provided, however, that at the end of the four-year research collaboration, Genus was required to select a specified number of licensed products and the license is limited to those particular products. The Genus Agreement continues until the expiration, abandonment, or invalidation of the last patent or patent application within the licensed patent rights; provided, however, that each party may terminate the Genus Agreement upon the occurrence of certain events, and Genus may terminate the Genus Agreement at its sole discretion upon written notice. In addition to an upfront payment received, the Company is eligible to receive milestone payments from Genus in the event certain regulatory and commercial milestones are met, for a total of $10.0 million. The Company will also be eligible to receive either low- to mid-single-digit royalties or low-single to low-double-digit royalties on net sales of licensed products.

The Company and Genus entered into a four-year research collaboration, which was funded by Genus. The collaboration ended in May 2020. During the years ended December 31, 2019 and 2020, the Company recognized revenue of $2.3 million and $0.8 million related to the Genus Agreement, respectively.

Genus made an equity investment in the Company's Series B convertible preferred stock at fair market value.

Private Company License Agreement

On May 15, 2020, the Company entered into an Exclusive License Agreement, as amended, with a related party private company ("Private Company License Agreement"), under which the Company granted the private company an exclusive worldwide license under certain intellectual property rights and know-how in a defined field. See Note 7 for more details.

The Company is eligible to receive milestone payments for licensed products following the first commercial sale of each such licensed product in each of the United States and the first European country in which each such licensed product is sold by the private company. The private company may select one of several milestone payment amounts for each licensed product, which then dictates the applicable royalty rate for net sales of licensed products. The Company is also eligible to receive a percentage of sublicensing revenues earned by the private company.

The Private Company License Agreement will continue in force and effect until the expiration, abandonment or invalidation of the last patent or patent application within the licensed patent rights. The Private Company License Agreement may be terminated during the term by either party for an uncured material breach or bankruptcy. Additionally, the private company may terminate the Private Company License Agreement upon 90 days' written notice to the Company.

As consideration for the exclusive license, the private company issued to the Company 7,500,000 shares of convertible preferred stock with an estimated fair value of $7.5 million, which was the price paid for similar shares by another investor, and was an arm's length transaction. The Company accounted for the grant of license as a contract with a customer under ASC 606 and recognized $7.5 million as license and collaboration revenue in its consolidated statements of operations and comprehensive loss for the year ended December 31, 2020.

On May 15, 2020, the Company entered into a separate option agreement under which it granted the private company a three-year option to negotiate an exclusive, royalty-bearing, worldwide license in a defined field to certain CRISPR-Cas9 patent rights controlled by the Company. The Company received a $50,000 upfront option payment and may receive annual option fees and an option exercise fee. The Company recorded the upfront payment received in long term deferred revenue in the consolidated balance sheet as of December 31, 2020.

Memorial Sloan Kettering Cancer Center

On November 13, 2020, the Company entered into an Exclusive License Agreement with MSKCC ("the MSKCC Agreement") under which the Company exclusively licensed know-how, biological materials, and related intellectual property relating to humanized single-chain variable fragments (scFvs) targeting CD371 for use in T cells, natural killer (NK) cells, and induced pluripotent stem cell (iPSC)-derived cells for allogeneic CD371-targeted cell therapy (the Company's CB-012 product candidate). The Company paid an upfront payment of $0.5 million in cash and $2.1 million in stock. For each licensed product, there are potential clinical, regulatory, and commercial milestones totaling $112.0 million and, in the event the Company, or Company's affiliates or sublicensees, receive regulatory approval for CB-012, the Company will owe low- to mid-single-digit tiered royalties on net sales by the Company, its affiliates and its sublicensees. The Company's license includes the right to sublicense through multiple tiers and the Company will owe MSKCC a percentage of upfront cash or equity received from the Company's sublicensees. The percentage owed decreases as the Company's products move through development, starting at a low-double-digit percentage if clinical trials have not yet begun and decreasing to a mid-single-digit percentage if the product is in later clinical trial stages. The Company is also responsible for a percentage of licensed patent costs. The MSKCC Agreement includes certain diligence milestones that the Company must meet, which may be extended upon payment of additional fees.

MSKCC is entitled to certain success payments in the event that the Company's common stock fair value increases by certain multiples of increasing value based on a comparison of the fair market value of the Company's common stock compared with the stock price of the Company's Series B convertible preferred stock financing $9.4379, as adjusted for any stock splits, during a specified time interval. Under the MSKCC Agreement, as a publicly traded company, the Company's common stock fair value is determined by any given 45-day VWAP (volume weight average trading price). At the Company's option, payments may be made in cash or common stock. The relevant time interval commences when the first patient is dosed with the Company's CB-012 product candidate in the first phase 1 clinical trial and ends upon the earlier of the third anniversary of approval of the Company's BLA by the FDA or 10 years from the date the first patient was dosed with CB-012 in the first phase 1 clinical trial. The aggregate success payments are not to exceed $35.0 million. Additionally, if the Company undergoes a change of control during the time period, a change of control payment may be owed, depending upon the increase in the Company's stock price due to the change of control and also to what extent success payments have already been paid. In no event will the combination of success payments and the change of control payment exceed $35.0 million.

The following table summarizes MSKCC success payments amounts:

Multiple of initial share price at issuance	5x	10x	15x
Success payment(s) (in millions)	$10.0	$10.0	$15.0

The Company may terminate the MSKCC Agreement upon 90 calendar days' prior written notice. MSKCC may terminate in the event of the Company's uncured material breach, bankruptcy, or criminal activity. In the event that MSKCC materially breaches the MSKCC Agreement in certain circumstances (*e.g.*, granting a third party a license in the Company's field), then during the time of such uncured breach, MSKCC is not entitled to receive any success payments or any change of control payment.

As of December 31, 2020, the estimated fair value of the total success payments obligation to MSKCC was $2.7 million, which was included in the consolidated balance sheet as of December 31, 2020 and recognized within research and development expense in the consolidated statement of operations and comprehensive loss upon issuance of the success payments liability during the year ended December 31, 2020. The change in fair value of success payments from issuance to December 31, 2020 was *de minimis*.

5. Revenue

Disaggregation of Revenue

The Company disaggregates revenue by geographical market based on the licensing and collaboration partners' location of research and development activities. The following is a summary of revenue by geographic location for the year ended December 31, 2019 and 2020 (in thousands):

	2019	2020
United States	$5,348	$12,003
Rest of world	439	358
Total	$5,787	$12,361

During the year ended December 31, 2019, the Company recognized $2.3 million of revenue related to performance obligations satisfied over time and $3.5 million of revenue related to performance obligations satisfied at a point in time. During the year ended December 31, 2020, the Company recognized $0.8 million of revenue related to performance obligations satisfied over time and $11.6 million of revenue related to performance obligations satisfied at a point in time.

Contract Balances

Accounts receivable relate to the Company's right to consideration for performance obligations completed (or partially completed) for which the Company has an unconditional right to consideration. The Company's accounts receivable balances represent amounts that are billed to licensees with invoices outstanding as of the period end.

Contract assets are rights to consideration in exchange for license and maintenance fees that the Company has transferred to a customer when such right is conditional on something other than the passage of time. The Company's contract asset balances represent royalties and milestones that are unbilled as of the period end.

Contract liabilities consist of deferred revenue and relate to amounts invoiced to or advance consideration received from customers, which precede the Company's satisfaction of the associated performance obligation(s). The Company's deferred revenue primarily results from upfront payments received under license agreements that also include non-refundable annual license fees, which are accounted for as material rights for license renewals and are recognized at the point in time the annual license fee is paid by the licensee and the renewal period begins.

The following table presents changes in the Company's contract assets and liabilities during the year ended December 31, 2019 (in thousands):

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Accounts receivable	$ 542	$ 4,152	$ (4,689)	$ 5
Contract assets:				
Unbilled accounts receivable	$ 80	$ 836	$ (80)	$ 836
Contract liabilities:				
Deferred revenue, current and long-term	$ 1,844	$ 2,707	$ (2,848)	$ 1,703

The following table presents changes in the Company's contract assets and liabilities during the year ended December 31, 2020 (in thousands):

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Accounts receivable	$ 5	$ 4,650	$ (4,505)	$ 150
Contract assets:				
Unbilled accounts receivable	$ 836	$ 1,328	$ (836)	$ 1,328
Contract liabilities:				
Deferred revenue, current and long-term	$ 1,703	$ 1,425	$ (2,030)	$ 1,098

Unbilled accounts receivable increased during the year ended December 31, 2020 primarily due Company's right to consideration related to earned royalties not billed as of December 31, 2020.

Deferred revenue decreased during the year ended December 31, 2020 because the recognition of revenue from contracts entered into in prior periods exceeded the value of the transaction price allocated to performance obligations during the current period.

During the years ended December 31, 2019 and 2020, the Company recognized $1.8 million and $0.7 million of revenues that were included in the opening contract liabilities balance, respectively.

Transaction Prices Allocated to the Remaining Performance Obligations

Remaining unsatisfied performance obligations represent in aggregate the amount of a transaction price that has been allocated to performance obligations not delivered, or only partially undelivered, as of the end of the reporting period. The value of transaction prices allocated to remaining unsatisfied performance obligations as of December 31, 2020 was approximately $1.1 million. The Company expects to recognize approximately $0.2 million of remaining performance obligations as revenue in the next 12 months, and the remainder thereafter.

Capitalized Contract Acquisition Costs and Fulfillment Cost

The Company did not incur any expenses to obtain license and collaboration agreements and costs to fulfill those contracts do not generate or enhance resources of the Company. As such, no costs to obtain or fulfill a contract have been capitalized in any period.

6. Balance Sheet Items

Other receivables consisted of the following at December 31 (in thousands):

	2019	2020
Patent cost reimbursements	$2,565	$3,672
Other	576	10
Total	$3,141	$3,682

Prepaid expenses and other current assets consisted of the following at December 31 (in thousands):

	2019	2020
Prepaid income taxes	$2,037	$1,479
Prepaid contract manufacturing costs	1,145	954
Other	373	760
Total	$3,555	$3,193

Property and equipment, net, consisted of the following at December 31 (in thousands):

	2019	2020
Furniture and equipment	$ 117	$ 117
Computer equipment	261	263
Lab equipment	5,067	5,038
Leasehold improvements	1,145	1,180
	6,590	6,598
Less: accumulated depreciation and amortization	(2,258)	(3,096)
Property and equipment, net	$ 4,332	$ 3,502

Depreciation and amortization expense related to property and equipment was $0.8 million and $0.9 million for the years ended December 31, 2019 and 2020, respectively.

Accrued expenses and other current liabilities consisted of the following at December 31 (in thousands):

	2019	2020
Accrued patent expenses	$4,188	$5,087
Income taxes payable	11	5
Accrued sublicensing fees	475	402
Accrued employee compensation and related expenses	400	2,081
Accrued research and development expenses	590	581
Credit card liability	532	193
Other	628	624
Total	$6,824	$8,973

7. Related Party Transactions

Private Company Investment and Exclusive License Agreement

On May 15, 2020, the Company received 7,500,000 shares of convertible preferred stock with an estimated fair value of $7.5 million as consideration for the Private Company License Agreement (Note 4). This represents a material voting interest in the private company and entitles the Company to hold one out of the three private company's board of director seats. The Company concluded that the private company is a variable interest entity and that the Company is not its primary beneficiary, based on the Company's representation on the private company's board of directors. As the private company's convertible preferred stock is not in substance common stock, the Company records this investment using the measurement alternative in accordance with ASC 321. Under the measurement alternative, the Company's investment in the private company's convertible preferred stock is initially recorded at its estimated fair value, but the carrying value may be adjusted through earnings upon an impairment or when there is an observable price change involving the same or a similar investment with the private company. As of December 31, 2020, there were no changes to the carrying value of the investment (see Note 4).

Amended and Restated Collaboration and License Agreement with Pioneer

As of December 31, 2019 and 2020, DuPont held more than 10% of voting interest in the Company and Pioneer is, therefore, considered a related party.

In accordance with the Pioneer Agreement (Note 4), Pioneer met a certain commercial milestone in December 2020, and as a result, the Company recognized $0.3 million of milestone revenues from Pioneer during the year ended December 31, 2020. The Company did not have any revenue from Pioneer during the year ended December 31, 2019. In December 2020, the Company entered into an amendment to the Pioneer Agreement under which Pioneer assigned to the Company the chRDNA patent family developed under the research collaboration, and the Company paid an upfront payment of $0.5 million (see Note 4).

Scientific Advisory Board Payments

Dr. Doudna, a co-founder and significant shareholder of the Company, receive compensation for participating on the Company's SAB. During the years ended December 31, 2019 and 2020, the Company paid Dr. Doudna less than $0.1 million for her participation on the SAB.

Officer Promissory Note

In November 2018, the Company's President and Chief Executive Officer entered into a promissory note with the Company for $1.1 million, as a means to provide liquidity without triggering a taxable event. The note bears interest at a rate of 3.04%, compounded annually, and is payable in five years, together with principal and accrued interest. The promissory note is secured by 225,410 shares of Caribou common stock owned by the President and Chief Executive Officer and has been determined to be non-recourse for accounting purposes and, as such, the issuance of the promissory note is effectively the grant of a new share option. A one-time stock compensation charge of $0.7 million was recorded as general and administrative expenses during the year ended December 31, 2018. The promissory note was still outstanding as of December 31, 2019 and 2020.

8. Promissory Note

On May 6, 2020, the Company entered into a promissory note with WebBank (the "Lender") pursuant to the Paycheck Protection Program ("PPP") administered by the Small Business Administration ("SBA") under the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") for a total amount of $1.6 million ("PPP Loan").

The PPP Loan has a two-year term and bears interest at a stated rate of 1.0% per annum, accrued monthly, beginning on the date the PPP Loan is issued by the Lender. Monthly principal and interest payments, less the amount of any potential forgiveness, will commence on the monthly payment date after which the SBA has notified the Lender of the forgiveness determination or, in the case of Lender's determination, beginning on the monthly payment date after the period for which the Company's right to request SBA review of such determination has lapsed on which a forgiveness decision is received from the Lender.

The Company did not provide any collateral or guarantees for the PPP Loan, nor did the Company pay any facility charge to obtain the PPP Loan. The PPP Loan provides for customary events of default, including, among others, those relating to failure to make payment, bankruptcy, breaches of representations and material adverse effects. The Company may prepay the principal of the PPP Loan at any time without incurring any prepayment charges.

The PPP Loan may be partially or fully forgiven if the Company complies with the provisions of the CARES Act including the use of PPP Loan proceeds for payroll costs, rent, utilities and certain other expenses, and at least 60% of the PPP Loan proceeds must be used for payroll costs as defined by the CARES Act. Any forgiveness of the PPP Loan will be subject to approval by the SBA and the Lender will require the Company to apply for such forgiveness in the future.

In December 2020, the Company applied for forgiveness of the PPP Loan and has not received a decision as of the date these consolidated financial statements were available to be issued.

9. Commitments and Contingencies

Facility Lease Agreements

The Company leases laboratory and office space under non-cancelable operating agreements. The lease agreements provide for escalation of rent payments each year through 2025. The Company records rent expense on a straight-line basis over the term of the leases. For tenant improvement allowances funded by landlord incentives, the Company records a deferred lease incentive liability in accrued expenses and other liabilities and amortizes the deferred lease incentive liability as a reduction to rent expense on the consolidated statements of operations and comprehensive loss over the term of the applicable lease. The Company has recorded $0.6 million related to the required security deposits in other assets, long-term, in the consolidated balance sheets.

As of December 31, 2020, future minimum lease payments under the leases are as follows (in thousands):

2021	$ 2,610
2022	2,690
2023	2,771
2024	2,856
2025	2,745
Total	$13,672

Rent expense was $1.6 million and $2.5 million for the years ended December 31, 2019 and 2020, respectively.

Capital Lease

The Company has accounted for certain leased equipment as a capital lease due to the ownership of such equipment transferring to the Company at the end of the lease term. As of December 31, 2019 and 2020, the total capital lease obligation amounted to $0.2 million and $0.1 million, respectively. The Company included the current portion of the capital lease obligation in the accrued expenses and other current liabilities and the non-current portion of the capital lease in other liabilities within the consolidated balance sheets. As of December 31, 2020, the sum of all remaining future minimum lease payments of the Company’s capital lease amounts to $0.1 million, which is due within 12 months.

Research and Development Agreements

The Company enters into various agreements in the ordinary course of business, such as those with suppliers, contract research organizations, CMOs, CROs, and clinical trial sites, and the like. These agreements provide for termination at the request of either party with less than one-year notice and are, therefore, cancelable contracts and, if canceled, are not anticipated to have a material effect on the consolidated financial condition, results of operations or cash flows of the Company.

Guarantees and Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for certain indemnifications. The Company's exposure under these agreements is unknown because any such claims may be made against the Company in the future. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of December 31, 2019 and 2020, the Company does not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

Intellia Arbitration

On October 16, 2018, Intellia initiated an arbitration proceeding with JAMS asserting that the Company had violated the terms and conditions of the Intellia License Agreement. The arbitration involves whether two patent families relating, respectively, to CRISPR-Cas9 chRDNAs and Cas9 scaffolds are included in the Intellia License Agreement. On September 19, 2019, the parties received an interim award from the arbitration panel ruling that the two patent families are included in the Intellia License Agreement, but the arbitration panel granted the Company an exclusive leaseback to Cas9 chRDNAs under economic terms to be negotiated by the parties. On February 6, 2020, the arbitration panel clarified that the leaseback relates solely to the Company's CB-010 program and instructed the parties to negotiate economic terms based on a leaseback of that scope. The arbitration panel has retained jurisdiction of the dispute. The Company has not concluded its negotiations with Intellia. In the event that the parties are unable to reach economic terms, the arbitration panel may issue a final decision determining the economic terms of the leaseback agreement. The final outcome of the arbitration and its financial impact on the Company cannot be determined at this time.

10. Convertible Preferred Stock

The authorized, issued and outstanding shares of the convertible preferred stock and liquidation preferences as of December 31, 2019 and 2020, are as follows (in thousands, except for share amounts):

Series	Authorized Shares	Outstanding Shares	Liquidation Preference	Carrying Value
Series A	1,576,342	1,576,342	$3,550	$3,452
Series A-1	3,004,124	3,004,124	8,000	7,901
Series B	3,186,116	3,186,116	30,070	29,970
	7,766,582	7,766,582	$41,620	$41,323

The rights, preferences, and privileges of the Series A, Series A-1, and Series B convertible preferred stock as of December 31, 2019 and 2020, were as follows:

Dividends

The Company shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Company, other than dividends on shares of common stock payable in shares of common stock, unless the holders of the convertible preferred stock then outstanding shall first receive, or simultaneously receive, in order of priority first to Series B convertible preferred stock-holders, then to Series A convertible preferred stock-holders and the Series A-1 preferred convertible stock-holders, and finally to common stock. The dividend on each outstanding share of convertible preferred stock equals to the greater of (i) $0.18 per share of Series A preferred stock, (ii) $0.213 per share of Series A-1 preferred stock, and (iii) $0.76 per share of Series B preferred stock, subject to appropriate adjustment in the event of any stock dividend, stock split, or other similar recapitalization or (ii) the dividend's amount payable on such share on as-converted to common stock basis. No dividends have been declared to date.

Conversion

Convertible preferred stock is convertible, at the option of the holder, at any time, into fully paid, non-assessable shares of common stock at an initial conversion ratio of one-to-one.

The convertible preferred stock will automatically convert into common stock, at the then-applicable conversion rate, upon either (i) the closing of an underwritten initial public offering of the Company's common stock pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended, at a price of at least $14.1569 per share, resulting in at least $50.0 million of gross proceeds to the Company; (ii) the consent of at least a majority of the then outstanding shares of the preferred stock, voting together as a single class on as-converted to common stock basis, and the holders of a majority of the outstanding Series B convertible preferred stock, consenting together as a single class on an as converted to common stock basis.

Voting Rights

The holders of convertible preferred stock are entitled to that number of votes on all matters presented to stockholders equal to the number of shares of common stock then-issuable upon conversion of such preferred stock.

Liquidation

In the event of any sale of substantially all of the assets, a merger, or a liquidation, dissolution or winding up of the Company, as defined in the Company's certificate of incorporation, the holders of Series A, A-1 and B convertible preferred stock will be entitled to receive in preference to the holders of common stock an amount per share equal to the original issue price of $2.252, $2.663, and $9.4379 per share, respectively, as adjusted for stock splits, combinations, and reorganizations, plus declared and unpaid dividends, if any. Series B holders will receive their liquidation preference and any declared but unpaid dividends before any distribution is made to Series A and A-1 holders. Series A and A-1 holders will receive their liquidation preference and any declared but unpaid dividends ratably before any distribution is made to common holders. After distributions to all preferred stockholders of all preferential amounts, the remaining assets of the Company will be distributed among the holders of shares of preferred stock and common stock on a pro rata basis based on the number of shares held by each holder, treating the preferred stock on an as-converted basis immediately prior to such sale of assets, merger, or liquidation, dissolution or winding up.

Redemption

The convertible preferred stock is not redeemable at the option of the holder thereof. Upon the occurrence of certain change in control events that are outside of the Company's control, including liquidation, sale or transfer, holders of the convertible preferred stock can effectively cause redemption for cash. As a result, the Company classified the convertible preferred stock as mezzanine equity on the consolidated balance sheets as the stock is contingently redeemable.

11. Common Stock

Common stockholders are entitled to dividends when and if declared by the Company's Board of Directors and after any convertible preferred share dividends are fully paid. The holder of each share of common stock is entitled to one vote. As of December 31, 2020, the Company has never declared a dividend.

Common stock reserved for future issuance, on an as converted basis, consists of the following:

	2019	2020
Preferred stock, issued and outstanding	7,766,582	7,766,582
Stock options, issued and outstanding	2,618,598	2,486,559
Stock options, authorized for future issuance	288,572	320,312
Restricted stock awards, issued and outstanding	—	3,300
Total	10,673,752	10,576,753

12. Stock Option Plan

In 2012, the Company adopted a 2012 Stock Option and Issuance Plan (the "2012 Plan"), which allowed for the granting of incentive stock options ("ISOs"), non-qualified stock options ("NSOs") and restricted stock awards ("RSAs") to employees, Board of Directors, and consultants. The Company granted a total 250,000 stock options under the 2012 Plan until it was superseded.

In 2013, the Company adopted a 2013 Equity Incentive Plan (as amended, the "2013 Plan"), which allows for the granting of ISOs and NSOs to the Company's employees, Board of Directors, and consultants. ISOs may be granted only to the Company's employees, including officers and directors who are also employees. NSOs may be granted to employees, consultants and non-employee directors.

Stock options under the 2013 Plan may be granted at prices no less than 100% of the estimated fair value of the common shares on the date of grant, as determined by the Company's Board of Directors, with a maximum term of 10 years; provided, however, that the exercise price of an ISO or an NSO granted to a 10% holder of outstanding shares shall not be less than 110% of the estimated fair value of the shares on the date of grant and may only be granted with a term of five years. In general, the Company's ISO grants vest over four years, with 25% of the option vesting after a one-year cliff and the remainder vesting monthly thereafter. The vesting periods for the Company's NSO grants vary depending upon the length of service provided to the Company and, for the years ended December 31, 2019 and 2020, such grants vested ratably from three months to two years.

As of December 31, 2020, a total of 2,806,871 shares of common stock are authorized for issuance and 320,312 shares are available for future grant under the 2013 Plan.

The following table summarizes stock option activity for employees and non-employees during the years ended December 31, 2019 and 2020:

	Shares Available to Grant	Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (a)
			(Aggregate Intrinsic Value in thousands)		
Outstanding at December 31, 2018	798,188	2,191,009	$ 2.37	5.8	$ 5,546
Options granted	(614,367)	614,367	$ 4.88	9.5	
Options exercised	—	(73,727)	$ 2.94	0.2	
Options cancelled or forfeited	104,751	(113,051)	$ 2.82	—	
Outstanding at December 31, 2019	288,572	2,618,598	$ 2.92	6.1	$ 4,817
RSAs granted	(3,300)	—			
Options granted	(280,430)	280,430	$ 5.13	9.3	
Options exercised	—	(105,299)	$ 2.56	4.1	
Options cancelled or forfeited	315,470	(307,170)	$ 4.49	—	
Outstanding at December 31, 2020	320,312	2,486,559	$ 2.97	5.3	$ 6,929
Exercisable at December 31, 2020		1,729,680	$ 2.12	3.9	$ 6,294
Vested and expected to vest at December 31, 2020		2,486,559	$ 2.97	5.3	$ 6,929

(a) The aggregate intrinsic value is calculated as the difference between the stock options exercise price and the estimated fair value of the underlying common stock at December 31, 2020.

The following table summarizes information about stock options outstanding for employees and non-employees as of December 31, 2020:

Exercise Prices	Shares Outstanding	Weighted-Average Remaining Contractual Term of Shares Outstanding (years)	Shares Exercisable	Weighted Average Remaining Contractual Term of Shares Exercisable (years)
$0.10	250,000	0.6	250,000	0.6
$0.43	145,000	1.4	145,000	1.4
$0.51	181,506	2.9	181,506	2.9
$0.72	334,445	3.1	334,445	3.1
$2.17	60,000	4.9	60,000	4.9
$2.94	178,935	3.9	176,685	3.9
$3.29	195,385	5.2	167,963	4.9
$4.88	847,748	8.2	361,873	7.8
$5.19	218,540	9.6	5,333	9.5
$5.37	75,000	2.4	46,875	2.4
	2,486,559		1,729,680	

The Company has recorded stock-based compensation expenses related to employee and non-employee stock options granted in the consolidated statements of operations and comprehensive loss as follows for the years ended December 31, 2019 and 2020 (in thousands):

	2019	2020
Research and development	$ 597	$ 694
General and administrative	637	308
Total	$1,234	$1,002

Stock-based compensation expenses related to employees were $1.2 million and $1.0 million for the years ended December 31, 2019 and 2020, respectively. Stock-based compensation expenses related to non-employees were $0.1 million and less than $0.1 million for the years ended December 31, 2019 and 2020, respectively.

Grant Date Fair Value

During the years ended December 31, 2019 and 2020, the Company granted 614,367 and 280,430 stock options to employees and non-employees with the grant date fair value of $2.95 and $3.30, respectively.

The Company estimated the fair value of each employee and non-employee stock option award on the grant date using the Black-Scholes option-pricing model based on the following assumptions for the years ended December 31:

	2019	2020
Volatility	70.3% to 70.7%	72.0% to 76.8%
Expected term (in years)	6.0 to 9.4	5.5 to 10.0
Risk free interest rate	1.9%	0.3% to 0.7%
Expected dividend yield	0.0%	0.0%

As of December 31, 2020, there was $2.1 million of unrecognized stock-based compensation expense related to employee and non-employee stock options that is expected to be recognized over a weighted-average period of 1.2 years.

Restricted Stock Awards

In June and October of 2020, the Company's Board of Directors granted a total of 3,300 RSAs to a non-employee that vested over a service period of three months. Stock-based compensation expense for RSAs is recognized ratably over the service period and amounted to less than $0.1 million for the year ended December 31, 2020, which was reported within the general and administrative expense in the consolidated statement of operations and comprehensive loss. RSAs were fully vested and outstanding in common stock as of December 31, 2020.

13. 401(k) Savings Plan

In 2017, the Company established a defined-contribution savings plan under Section 401(k) of the Internal Revenue Code of 1986, as amended ("Tax Code"). The Company's 401(k) plan is available to all employees and allows participants to defer a portion of their annual compensation on a pretax basis subject to applicable laws. The Company also provides a 4% match for employee contributions up to a certain limit. During the years ended December 31, 2019 and 2020, the Company contributed $0.3 million to the 401(k) plan.

14. Income Taxes

The Company reported pre-tax book income (loss) in the United States of $(31.0) million and $(36.1) million for the years ended December 31, 2019 and 2020, respectively.

A reconciliation of the U.S. statutory income tax rate to the Company's effective tax rate is as follows:

	2019	2020
Federal income tax (benefit) at statutory rate	(21%)	(21%)
State taxes, net of federal benefit	(4%)	(6%)
Change in valuation allowance, federal	0%	19%
Change in valuation allowance, state	1%	6%
R&D tax credits, net of reserves	(2%)	(2%)
Other	2%	(1%)
Effective income tax rate	(24%)	(5%)

For the years ended December 31, 2019 and 2020, the Company's benefit from income taxes consisted of the following (in thousands):

	2019	2020
Current income taxes:		
Federal	$ (404)	$ (907)
State	(20)	7
Total current income tax (benefit) expense	(424)	(900)
Deferred income taxes:		
Federal	(6,201)	(950)
State	(912)	31
Total deferred income tax benefit	(7,113)	(919)
Total income tax benefit	$(7,537)	$(1,819)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

The following table presents significant components of the Company's deferred tax assets and liabilities as of December 31, 2019 and 2020 (in thousands):

	2019	2020
Deferred tax assets:		
NOL and tax attributes	$ 2,362	10,110
Accrued expenses and reserve	359	868
Deferred revenue and expenses	511	505
State income taxes	8	7
Capitalized license and patent costs	68	1,493
Stock-based compensation	163	203
Total deferred tax assets	3,471	13,186
Valuation allowance	(1,350)	(10,702)
Net deferred tax assets	$ 2,121	$ 2,484
Deferred tax liabilities:		
Investments in equity securities	$(1,948)	$ (1,866)
Fixed assets	(824)	(773)
Total deferred tax liabilities	(2,772)	(2,639)
Net deferred tax liabilities	$ (651)	$ (155)

The Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets. As of December 31, 2019, a valuation allowance of $1.4 million was recorded against the Company's deferred tax assets. As of December 31, 2020, the Company's deferred tax assets were primarily the result of historical federal and state net operating loss ("NOL") and tax credit accrued expenses and reserves, and intangible assets capitalized. As of December 31, 2020, a valuation allowance of $10.7 million was recorded against the Company's deferred tax assets.

As of December 31, 2020, the Company had federal NOL carryforwards of $17.5 million, which do not expire. As of December 31, 2020, the Company had state NOL carryforwards of $15.9 million, which may be available to offset future state income, and which expire at various years beginning with 2036.

As of December 31, 2020, the Company generated federal research and development tax credit carryforwards of $3.8 million, which will begin to expire in 2034. As of December 31, 2020, the Company had state credit carryforwards of $2.8 million available to reduce future tax liabilities, which do not expire. The CARES Act, among other things, permits NOL carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in tax years beginning after December 31, 2017 and before January 1, 2021 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes.

Under Section 382 of the Tax Code, the ability to utilize NOL carryforwards or other tax attributes, such as research tax credits, in any taxable year may be limited if the Company has experienced an "ownership change." Generally, a Section 382 ownership change occurs if there is a cumulative increase of more than 50 percentage points in the stock ownership of one or more stockholders or groups of stockholders who own at least 5% of a corporation's stock within a specified testing period. Similar rules may apply under state tax laws. As a result of the Company's analysis, the Company believes that there have been two ownership changes under Section 382; however, none of the Company's state NOL and research and development tax credit carryforwards is currently expected to expire unused. The Company may experience ownership changes as a result of future financing or other changes in the stock ownership.

The following table summarizes the activity related to the Company's unrecognized tax benefits for the two years ended December 31, 2020 (in thousands):

Unrecognized tax benefits—January 1, 2019	$ 589
Increases related to current year tax positions	215
Changes in prior year tax positions	6
Decreases related to lapse of statutes	—
Unrecognized tax benefits—December 31, 2019	810
Increases related to current year tax positions	363
Changes in prior year tax positions	180
Decreases related to lapse of statutes	—
Unrecognized tax benefits—December 31, 2020	$ 1,353

As of December 31, 2019 and 2020, the amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate were $0.4 million and zero, respectively. The Company does not expect a significant change to its unrecognized tax benefits over the next 12 months. The unrecognized tax benefits may increase or change during the next year for items that arise in the ordinary course of business.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2019 and 2020, the Company had no accrued interest or penalties related to uncertain tax positions and no amounts have been recognized in the Company's consolidated statements of operations and comprehensive loss.

The Company files its federal and state income tax returns with varying statutes of limitations. The Company's tax years from 2012 will remain open to examination due to the carryover of the unused NOLs and tax credits. There are no ongoing examinations by taxing authorities at this time.

The CARES Act changed certain provisions of the Tax Act. Under the CARES Act, NOLs arising in taxable years beginning after December 31, 2017 and ending before January 1, 2021 may be carried back to each of the five taxable years preceding the tax year of such loss, but NOLs arising in taxable years beginning after December 31, 2020 may not be carried back. In addition, the CARES Act eliminated the limitation on the deduction of NOLs to 80% of current year taxable income for taxable years beginning before January 1, 2021, and increased the amount of interest expense that may be deducted to 50% of adjusted taxable income for taxable years beginning in 2019 or 2020. The Company has recorded an income tax benefit of $0.9 million related to this legislation and continues to examine the impact the Tax Act may have on its business.

On June 29, 2020, California Assembly Bill 85 (AB 85) was signed into law, which suspends the use of NOLs and limits the use of research tax credits for 2020, 2021, and 2022. There may be periods during which the use of NOLs is suspended or otherwise limited, and limitation on the use of certain tax credits to offset California income and tax liabilities could accelerate, or permanently increase, state taxes owed. The Company continues to examine the impact this may have on its business.

On December 27, 2020, the federal "Consolidated Appropriations Act, 2021" was enacted, which includes further COVID-19 economic relief and extension of certain expiring tax provisions. The relief package includes a tax provision clarifying that businesses with forgiven PPP loans can deduct regular business expenses that are paid for with loan proceeds. Additional COVID-19 pandemic relief tax measures include an expansion of the employee retention credit, enhanced charitable contribution deductions, and a temporary full deduction for business expenses for food and beverages provided by a restaurant. These benefits do not have a material impact on the current tax provision.

15. Net Loss Per Share

The following table sets forth the computation of the basic and diluted net loss per share (in thousands, except share and per share amounts):

	2019	2020
Numerator:		
Net loss	$ (23,431)	$ (34,308)
Denominator:		
Weighted-average common shares outstanding used to compute net loss per share, basic and diluted	4,606,536	4,701,183
Net loss per share, basic and diluted	$ (5.09)	$ (7.30)

Since the Company was in a loss position for all periods presented, basic net loss per share is the same as diluted net loss per share for all periods as the inclusion of all common stock equivalents outstanding would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows as of December 31:

	2019	2020
Convertible preferred stock	7,766,582	7,766,582
Stock options outstanding	2,618,598	2,486,559
Common shares subject to nonrecourse notes	225,410	225,410
	10,610,590	10,478,551

16. Subsequent Events

On February 9, 2021, the Company entered into a Collaboration and License Agreement with AbbVie Manufacturing Management Unlimited Company (AbbVie). The Company granted AbbVie an exclusive, royalty-bearing, worldwide license, with the right to grant sublicenses, under its Cas12a chRDNA and cell therapy intellectual property, as well as under intellectual property that will be developed under the collaboration, solely for AbbVie to develop, commercialize, manufacture and otherwise exploit the collaboration CAR-T products in the field of human diagnostics, prophylactics and therapeutics. Under the license, AbbVie has selected its initial target and has reserved six additional targets, which may be substituted into the two program slots during the collaboration. The Company will conduct certain preclinical research, development, and manufacturing activities under the collaboration, including manufacturing the supply of licensed product for phase 1 clinical studies, and AbbVie will reimburse us for all such activities (including reimbursement for time spent by Company's employees at a designated FTE rate. In accordance with the Agreement, the Company received an upfront cash payment of $30.0 million. The Company is eligible to receive up to $300.0 million in future developmental, regulatory, and launch milestones. The Company is also eligible to receive additional payments for commercial milestones as well as global tiered royalties on incremental net sales of licensed products sold by AbbVie, its affiliates, and sublicensees in the high-single-digit to low-teens percent range, subject, in certain instances, to various reductions.

On March 2, 2021, the Company issued 6,663,940 shares of Series C convertible preferred stock at a purchase price of $17.257 per share. The Company received gross cash proceeds of $115.0 million and incurred $6.2 million in issuance costs.

On March 31, 2021, the Company entered into a ten-year lease agreement, which superseded and replaced its prior lease, as amended, and included additional office and laboratory space located within the same building in Berkeley, California. The lease agreement contains a renewal option for an additional term of five years. Monthly base rent under the lease agreement amounts to $0.3 million, subject to annual escalation of 3.1%, with a total minimum lease payment of $43.4 million payable over the next 10 years.

On March 30, 2021, the Company granted 858,682 common stock options to Company's employees and non-employees in accordance with Company's 2013 Plan.

On April 23, 2021, the Company entered into a license agreement with an unrelated third party under which the Company granted a non-exclusive license to certain CRISPR-Cas9 patent rights controlled by the Company. The Company will receive an upfront cash payment of low-single-digit millions of dollars, and a time-vesting warrant exercisable for shares of the third party's preferred stock. The Company has formed a new wholly-owned subsidiary for the purpose of holding this warrant.

The Company has evaluated subsequent events for consolidated financial statements purposes occurring through May 7, 2021, the date when these consolidated financial statements are available to be issued. Based on this evaluation, it was determined that, other than the events described above, no subsequent events occurred that would require recognition or disclosure in the consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)
(in thousands, except share and per share amounts)

	December 31, 2020	March 31, 2021
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 15,953	$145,924
Accounts receivable	150	76
Contract assets ($250 and $0 from related party, respectively)	1,328	973
Other receivables	3,682	4,776
Prepaid expenses and other current assets	3,193	4,176
Total current assets	24,306	155,925
INVESTMENTS IN EQUITY SECURITIES	7,626	7,626
PROPERTY AND EQUIPMENT—NET	3,502	3,380
OTHER ASSETS	612	1,034
TOTAL ASSETS	$ 36,046	$167,965
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Accounts payable ($500 and $0 to related party, respectively)	$ 2,601	$ 3,117
Accrued expenses and other current liabilities	8,973	13,163
Promissory note—PPP loan	654	655
Deferred revenue	161	5,275
Total current liabilities	12,389	22,210
LONG-TERM LIABILITIES:		
Deferred revenue, net of current portion ($50 and $50 from related party)	937	25,788
Deferred rent and lease incentive liability	925	917
Promissory note—PPP loan, net of current portion	924	926
Success payments liability	2,654	3,340
Other liabilities	176	168
Deferred tax liabilities	155	155
Total liabilities	18,160	53,504
COMMITMENTS AND CONTINGENCIES (Note 9)	—	—
CONVERTIBLE PREFERRED STOCK, par value $0.0001 per share—7,766,582 and 14,430,622 shares authorized at December 31, 2020 and March 31, 2021, respectively; 7,766,582 and 14,430,522 shares issued and outstanding at December 31, 2020 and March 31, 2021, respectively; (liquidation preference of $41,620 and $156,620 at December 31, 2020 and March 31, 2021, respectively)	41,323	150,150
STOCKHOLDERS' DEFICIT:		
Common stock, par value $0.0001 per share—15,914,951 and 24,500,000 shares authorized at December 31, 2020 and March 31, 2021, respectively; 5,341,498 and 5,663,068 shares issued and outstanding at December 31, 2020 and March 31, 2021, respectively	1	1
Additional paid-in capital	7,433	8,340
Accumulated deficit	(30,871)	(44,030)
Total stockholders' deficit	(23,437)	(35,689)
TOTAL LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT	$ 36,046	$167,965

See accompanying notes to condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Unaudited)
(in thousands, except share and per share amounts)

	Three Months Ended March 31,	
	2020	2021
Licensing and collaboration revenue	$ 1,701	$ 1,586
Operating expenses:		
Research and development	8,641	10,165
General and administrative	3,489	4,596
Total operating expenses	12,130	14,761
Loss from operations	(10,429)	(13,175)
Other income (expense):		
Interest income	142	4
Interest expense	(3)	(5)
Change in fair value of equity securities	(733)	—
Other income	21	17
Total other income (expense)	(573)	16
Net loss before provision for income taxes	(11,002)	(13,159)
Benefit from income taxes	(1,202)	—
Net loss and comprehensive loss	$ (9,800)	$ (13,159)
Net loss per share, basic and diluted	$ (2.11)	$ (2.52)
Weighted-average common shares outstanding, basic and diluted	4,636,644	5,225,226

See accompanying notes to condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)
(Unaudited)
(in thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Retained Earnings (Accumulated Deficit)	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
BALANCE—December 31, 2019	7,766,582	$ 41,323	4,862,054	$ 1	$ 4,025	$ 3,437	$ 7,463
Stock-based compensation expense	—	—	—	—	237	—	237
Net loss and comprehensive loss	—	—	—	—	—	(9,800)	(9,800)
BALANCE—March 31, 2020	7,766,582	$ 41,323	4,862,054	$ 1	$ 4,262	$ (6,363)	$ (2,100)
BALANCE—December 31, 2020	7,766,582	$ 41,323	5,341,498	$ 1	$ 7,433	$ (30,871)	$ (23,437)
Issuance of Series C convertible preferred stock, net of issuance costs of $6.2 million	6,663,940	108,827	—	—	—	—	—
Issuance of common stock on exercise of options	—	—	321,570	—	564	—	564
Stock-based compensation expense	—	—	—	—	343	—	343
Net loss and comprehensive loss	—	—	—	—	—	(13,159)	(13,159)
BALANCE—March 31, 2021	14,430,522	$ 150,150	5,663,068	$ 1	$ 8,340	$ (44,030)	$ (35,689)

See accompanying notes to condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(in thousands)

	Three Months Ended March 31,	
	2020	2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (9,800)	$ (13,159)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	226	221
Loss on disposal of fixed assets	—	3
Intrerest expense	—	4
Change in fair value of equity securities	733	—
Stock-based compensation expense	237	343
Fair value of success payments liability	—	686
Acquired in-process research and development	425	—
Changes in operating assets and liabilities:		
Accounts receivable	(29)	74
Contract assets	303	355
Other receivables	(491)	(1,095)
Prepaid expenses and other current assets	715	(562)
Other assets	(19)	(421)
Accounts payable	(1,037)	37
Accrued expenses and other current liabilities	602	3,879
Deferred revenue, current and long-term	(378)	29,964
Deferred rent and lease incentive liability	7	(8)
Other liabilities	(448)	(8)
Deferred tax liabilities	(289)	—
Net cash provided by (used in) operating activities	(9,243)	20,313
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from sale of equity securities	7,668	—
Purchases of property and equipment	(223)	(22)
Payments to acquire in-process research & development	(425)	—
Net cash provided by (used in) investing activities	7,020	(22)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of Series C convertible preferred stock, net of issuance costs	—	109,235
Proceeds from common stock options exercised	—	564
Principal payments for capital lease	(30)	(119)
Net cash provided by (used in) financing activities	(30)	109,680
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(2,253)	129,971
CASH AND CASH EQUIVALENTS —Beginning of period	41,070	15,953
CASH AND CASH EQUIVALENTS —End of period	$ 38,817	$ 145,924
SUPPLEMENTAL CASH FLOW INFORMATION:		
Cash paid for income taxes	$ 7	$ —
Cash paid for interest	$ 3	$ 1
SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITES:		
Purchases of property and equipment unpaid at period end	$ 22	$ 95
Deferred issuance costs related to initial public offering unpaid at period end	$ —	$ 422
Series C convertible preferred stock issuance costs unpaid at period end	$ —	$ 408

See accompanying notes to condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Description of the Business, Organization, and Liquidity

Business and Organization

Caribou Biosciences, Inc. (the "Company") is a clinical-stage CRISPR genome-editing biotechnology company. The Company is developing an internal pipeline of allogeneic CAR-T and CAR-NK cell therapies. It was incorporated in October 2011 as a Delaware corporation and is headquartered in Berkeley, California. The Company has four wholly-owned subsidiaries: Caribou Therapeutics Holdco, LLC, incorporated in Delaware in July 2014 and dissolved in December 2020; Antler Holdco, LLC, incorporated in Delaware in April 2019; Microbe Holdco, LLC, incorporated in Delaware in June 2020; and Arboreal Holdco, LLC, incorporated in Delaware in November 2020. The Company's wholly-owned subsidiaries hold interests in the Company's equity investments and do not have operating activities.

Liquidity

The Company has incurred net operating losses and negative cash flows from operations since its inception and had an accumulated deficit of $44.0 million as of March 31, 2021. During the three months ended March 31, 2021, the Company incurred a net loss of $13.2 million and generated $20.3 million of cash provided by operating activities. As of March 31, 2021, the Company had cash and cash equivalents of $145.9 million. The Company expects to continue to incur substantial losses, and its ability to achieve and sustain profitability will depend on the successful development, approval, and commercialization of product candidates and on the achievement of sufficient revenues to support its cost structure. The Company may never achieve profitability, and unless and until it does, the Company will need to continue to raise additional capital. Management expects that existing cash and cash equivalents of $145.9 million will be sufficient to fund its current operating plan for at least the next 12 months from the date of issuance of these condensed consolidated financial statements.

2. Summary of Significant Accounting Policies

There have been no changes to the significant accounting policies as disclosed in Note 2 to the Company's annual consolidated financial statements for the years ended December 31, 2019 and 2020 included elsewhere in this prospectus.

Basis of Presentation and Principles of Consolidation

The condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) and include the accounts of Caribou Biosciences, Inc. and its wholly-owned subsidiaries. All intercompany transactions are eliminated in consolidation.

In the opinion of the Company's management, the information furnished in these unaudited condensed consolidated financial statements reflect all adjustments, all of which are of a normal and recurring nature, necessary for a fair presentation of the financial position and results of operations for the reported interim periods. The Company considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. The results of operations for interim periods are not necessarily indicative of results to be expected for the full year or any other interim period.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities; the

disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements; and the reported amounts of revenue, income, and expenses during the reporting period. On an ongoing basis, the Company evaluates its estimates and assumptions including those related to revenue recognition, common stock valuation, stock-based compensation expense, accrued expenses related to research and development activities, valuation of success payments liability, and income taxes. Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Segments

The Company operates and manages its business as one reportable and operating segment, which is the business of developing an internal pipeline of allogeneic CAR-T and CAR-NK cell therapies. The Company's chief executive officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for allocating and evaluating financial performance. All long-lived assets are maintained in the United States.

Concentrations of Credit Risk and Other Uncertainties

Financial instruments that potentially subject the Company to concentration of credit risk consisted of cash and cash equivalents, accounts receivable, contract assets, other receivables, and investments in equity securities. Substantially all of the Company's cash and cash equivalents are deposited in accounts at one financial institution, and account balances may at times exceed federally insured limits. The Company believes the financial institution to be of high credit quality.

Licensees who represent 10% or more of the Company's revenues and accounts receivable and contract assets are as follows:

	Revenue		Accounts Receivable and Contract Assets	
	Three Months Ended			
	March 31, 2020	March 31, 2021	As of December 31, 2020	As of March 31, 2021
Licensee A	36.2%	38.8%	*	*
Licensee B	25.0%	34.1%	40.6%	55.8%
Licensee C	33.1%	*	*	*
Licensee D	*	*	13.2%	*
Licensee E, related party	*	*	16.9%	*
Licensee F	*	*	10.1%	*
Licensee G	*	*	*	14.9%
Licensee H	*	*	*	15.5%
Total	94.3%	72.9%	80.8%	86.2%

* Less than 10%

The Company monitors economic conditions to identify facts or circumstances that may indicate that any of its accounts receivable are not collectible and if the contract assets should be impaired. No allowance for doubtful accounts was recorded as of December 31, 2020 and March 31, 2021.

Deferred Issuance Costs

Issuance costs, consisting of legal, accounting, audit, and filing fees relating to in-process equity financings, including the Company's proposed initial public offering (IPO), are capitalized. Deferred issuance

costs are offset against offering proceeds upon the completion of an equity financing or an offering. In the event an equity financing or an offering is terminated or delayed, deferred issuance costs will be expensed immediately as a charge to general and administrative expenses in the condensed consolidated statements of operations and comprehensive loss. As of December 31, 2020, the Company did not capitalize any issuance costs. As of March 31, 2021, the Company capitalized deferred issuance costs in the amount of $0.4 million related to its planned IPO.

Patent Costs

The Company expenses costs for filing, prosecuting, and maintaining patents and patent applications, including certain of the patents and patent applications that the Company licenses from third parties, as incurred and classifies such costs as general and administrative expenses in the condensed consolidated statements of operations and comprehensive loss. In addition, the Company is entitled to receive reimbursement of a portion of the filing, prosecution, and maintenance costs for certain patents and patent applications from third parties. The Company accrues for these reimbursements as the respective expenses are incurred and classifies such reimbursements as a reduction of general and administrative expenses. During the three months ended March 31, 2020 and 2021, the Company incurred gross patent costs of $2.3 million and $3.9 million, respectively. During the three months ended March 31, 2020 and 2021, the Company recorded $1.1 million and $2.1 million, respectively, of patent reimbursements as a credit to general and administrative expense.

Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (FASB) or other standard-setting bodies and adopted by the Company as of the specified effective date.

New Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This ASU requires a lessee to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-to-use asset representing its right to use the underlying asset for the lease term. The Company may elect not to apply Topic 842 to short-term leases with a term of 12 months or less. This ASU is effective for the Company's fiscal years beginning after December 15, 2021 and interim periods within fiscal years beginning after December 15, 2022, with early adoption permitted. The Company is currently evaluating the impact of adoption of this update on its condensed consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments (Topic 326)*. The update provides guidance on the measurement of credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. The updated guidance replaces the current incurred loss impairment approach with a methodology to reflect expected credit losses and requires consideration of a broader range of reasonable and supportable information to explain credit loss estimates. This ASU is to be applied on a modified retrospective approach and is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022, and interim reporting periods within beginning after December 15, 2023. Early adoption is permitted for all entities for fiscal years beginning after December 15, 2018, and interim periods therein. The Company is currently evaluating the impact of adoption of this update on its condensed consolidated financial statements.

3. Fair Value Measurements and Fair Value of Financial Instruments

The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

The Company's financial instruments consisted of Level 1 and Level 3. Level 1 financial instruments are comprised of money market mutual funds. Level 3 financial instruments are comprised of success payments liability related to the MSKCC Agreement.

The following table sets forth the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands):

	Fair Value Measurements at December 31, 2020			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market investments (included in cash and cash equivalents)	$ 15,953	$ 15,953	$ —	$ —
Total	$ 15,953	$ 15,953	$ —	$ —
Liabilities:				
Success payments liability	$ 2,654	$ —	$ —	$ 2,654
Total	$ 2,654	$ —	$ —	$ 2,654

	Fair Value Measurements at March 31, 2021			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market investments (included in cash and cash equivalents)	$145,924	$145,924	$ —	$ —
Total	$145,924	$145,924	$ —	$ —
Liabilities:				
Success payments liability	$ 3,340	$ —	$ —	$ 3,340
Total	$ 3,340	$ —	$ —	$ 3,340

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial liability (in thousands):

	Success Payments Liability
Balance at December 31, 2020	$ 2,654
Change in fair value	686
Balance at March 31, 2021	$ 3,340

The Company recorded $0.7 million change in fair value of the success payments liability as research and development expense in its condensed consolidated statement of operations and comprehensive loss for the three months ended March 31, 2021.

The Company utilizes a Monte Carlo simulation model that requires significant estimates and assumptions in determining the estimated MSKCC success payments liability under the MSKCC Agreement and associated expense at each balance sheet date. The assumptions used to calculate the fair value of the success payments are subject to a significant amount of judgment including the expected volatility, estimated term, and estimated number and timing of valuation measurement dates.

The Company's liability for the MSKCC success payments is carried at fair value and changes are recognized as expense until the success payments liability is paid or expires (Note 4). The Monte Carlo simulation methodology models the future movement of stock prices based on several key variables. The table below summarizes key assumptions used in the valuation of success payments liability:

	As of December 31, 2020	As of March 31, 2021
Fair value of common stock	$ 9.93	$ 12.16
Risk free interest rate	0.93%	1.74%
Expected volatility	80%	80%
Probability	4.4% to 13.4%	5.9% to 17.1%
Expected term (years)	4.7 to 5.7	4.3 to 5.4

The computation of expected volatility was estimated using a combination of available information about the historical volatility of stocks of similar publicly traded companies for a period matching the expected term assumption and the Company's historical and implied volatility. The risk-free interest rate, expected volatility, and expected term assumptions depend on the estimated timing of the Company's phase 1 clinical trial and FDA approval of a particular product candidate. In addition, the Company incorporated the estimated number and timing of valuation measurement dates in the calculation of the success payments liability.

A small change in the assumptions and other inputs, such as the fair value of the Company's common stock, may have a relatively large change in the estimated valuation and associated liability and expense.

The carrying value of the promissory note approximates its fair value (see Note 8).

4. Significant Agreements

In-Licensing Agreements

The Regents of the University of California/University of Vienna

The Company entered into an Exclusive License Agreement, dated April 16, 2013, as amended, (the "UC/Vienna Agreement") with The Regents of the University of California ("UC") and the University of Vienna ("Vienna") (together, "UC/Vienna") wherein UC/Vienna granted the Company an exclusive worldwide license, with the right to sublicense, in all fields to the foundational CRISPR-Cas9 patent family co-owned by UC, Vienna, and Dr. Emmanuelle Charpentier (the "CVC IP"). Dr. Charpentier has not granted the Company any rights, either directly or indirectly. The UC/Vienna Agreement continues until the last-to-expire patent or last-to-be-abandoned patent application licensed under the UC/Vienna Agreement; provided, however, that UC/Vienna may terminate the UC/Vienna Agreement upon the occurrence of certain events and the Company may terminate the UC/Vienna Agreement at its sole discretion upon written notice. Without patent term adjustment or patent term extension, the CVC IP will expire in 2033. The UC/Vienna Agreement includes certain diligence milestones that the Company must meet. For products and services sold by the Company that are covered by the CVC IP, the Company will owe low- to mid-single-digit percent royalties on net sales, subject to a minimum annual royalty. Prior

to such time that the Company is selling products, the Company owes UC/Vienna an annual license maintenance fee. The Company may owe UC/Vienna up to $3.6 million in certain regulatory and clinical milestone payments in the field of human therapeutics and diagnostics for products developed by the Company, its affiliates, and sublicensees. Additionally, the Company pays UC/Vienna a specified percentage of sublicensing revenue the Company receives including cash and equity under the Company's sublicensing agreements, subject to certain exceptions. If the Company includes intellectual property owned or controlled by it in such sublicense, the Company pays UC/Vienna a low- double-digit percentage of sublicensing revenues received under the sublicense. If the Company does not include intellectual property owned or controlled by it in such sublicense, the Company pays UC/Vienna 50% of sublicensing revenues received under the sublicense. To date, the Company has entered into over 20 sublicensing agreements in a variety of fields such as human therapeutics, forestry, agriculture, research reagents, transgenic animals, certain livestock targets, internal research, bioproduction, cell lines, and microbial applications that include the CVC IP as well as other Cas9 intellectual property owned or controlled by the Company. The Company is obligated to reimburse UC for its prosecution and maintenance costs of the CVC IP.

For the three months ended March 31, 2020 and 2021, the Company paid UC/Vienna $0.2 million and $0.3 million, respectively, in sublicensing fees, which was recorded in research and development expenses in the condensed consolidated statements of operations and comprehensive loss.

The Company is obligated to reimburse UC for prosecution and maintenance costs of the CVC IP. For the three months ended March 31, 2020 and 2021, the Company reimbursed UC $1.9 million and $3.2 million, respectively, which was recorded in general and administrative expenses in the condensed consolidated statements of operations and comprehensive loss.

On December 15, 2016, the Company entered into a Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement ("IMA") relating to the CVC IP. Under the IMA, CRISPR Therapeutics AG reimburses the Company 50% of the amounts the Company reimburses UC for patent prosecution and maintenance costs. For the three months ended March 31, 2020 and 2021, CRISPR Therapeutics AG reimbursed the Company $0.7 million and $1.6 million, respectively, which was recorded as a reduction of general and administrative expenses in the condensed consolidated statements of operations and comprehensive loss.

Memorial Sloan Kettering Cancer Center

On November 13, 2020, the Company entered into an Exclusive License Agreement with MSKCC (the "MSKCC Agreement") under which the Company exclusively licensed know-how, biological materials, and related intellectual property relating to humanized single-chain variable fragments (scFvs) targeting CD371 for use in T cells, natural killer (NK) cells, and induced pluripotent stem cell (iPSC)-derived cells for allogeneic CD371-targeted cell therapy (the Company's CB-012 product candidate). The Company paid an upfront payment of $0.5 million in cash and $2.1 million in stock. For each licensed product, there are potential clinical, regulatory, and commercial milestones totaling $112.0 million and, in the event the Company, or Company's affiliates or sublicensees, receives regulatory approval for CB-012, the Company will owe low- to mid-single- digit percent tiered royalties on net sales by the Company, its affiliates and its sublicensees. The Company's license includes the right to sublicense through multiple tiers and the Company will owe MSKCC a percentage of upfront cash or equity received from the Company's sublicensees. The percentage owed decreases as the Company's products move through development, starting at a low-double-digit percentage if clinical trials have not yet begun and decreasing to a mid-single-digit percentage if the product is in later clinical trial stages. The Company is also responsible for a percentage of licensed patent costs. The MSKCC Agreement includes certain diligence milestones that the Company must meet, which may be extended upon payment of additional fees.

MSKCC is entitled to certain success payments in the event that the Company's common stock fair value increases by certain multiples of increasing value based on a comparison of the fair market value of the Company's common stock compared with the stock price of the Company's Series B convertible preferred stock financing $9.4379, as adjusted for any stock splits, during a specified time interval. Under the MSKCC Agreement, as a publicly traded company, the Company's common stock fair value is determined by any given 45-day VWAP (volume weight average trading price). At the Company's option, payments may be made in cash or common stock. The relevant time interval commences when the first patient is dosed with the Company's CB-012 product candidate in the first phase 1 clinical trial and ends upon the earlier of the third anniversary of approval of the Company's BLA by the FDA or 10 years from the date the first patient was dosed with CB-012 in the first phase 1 clinical trial. The aggregate success payments are not to exceed $35.0 million. Additionally, if the Company undergoes a change of control during the time period, a change of control payment may be owed, depending upon the increase in the Company's stock price due to the change of control and also to what extent success payments have already been paid. In no event will the combination of success payments and the change of control payment exceed $35.0 million.

The following table summarizes MSKCC success payments amounts:

Multiple of initial share price at issuance	5x	10x	15x
Success payment(s) (in millions)	$10.0	$10.0	$15.0

The Company may terminate the MSKCC Agreement upon 90 calendar days' prior written notice. MSKCC may terminate in the event of the Company's uncured material breach, bankruptcy, or criminal activity. In the event that MSKCC materially breaches the MSKCC Agreement in certain circumstances (*e.g.*, granting a third party a license in the Company's field), then during the time of such uncured breach, MSKCC is not entitled to receive any success payments or any change of control payment.

As of March 31, 2021, the estimated fair value of the total success payments obligation to MSKCC was $3.3 million, which was included in the condensed consolidated balance sheet. The Company recorded the change in fair value of success payments of $0.7 million as a research and development expense in its condensed consolidated statement of operations and comprehensive loss during the three months ended March 31, 2021.

Licensing and Collaboration Agreements

Intellia Therapeutics, Inc.

On July 16, 2014, the Company entered into a License Agreement, as amended ("Intellia License Agreement") and a Services Agreement ("Intellia Services Agreement") with Intellia, LLC, to which Intellia is a successor in interest. Under the Intellia License Agreement, the Company granted Intellia an exclusive worldwide license, with the right to sublicense, to certain CRISPR-Cas9 technology for a defined field of human therapeutics. Intellia granted the Company an exclusive worldwide license, with the right to sublicense, to its CRISPR-Cas9 technology for all fields outside of the defined field of human therapeutics, including a license to certain of Intellia's future CRISPR-Cas9 intellectual property until the Company's direct or indirect ownership percentage dropped below 10% (the "IP cut-off date"). Each party had the right to opt-in to any licenses in its field of use entered into by the other party prior to the IP cut-off date, subject to the terms and conditions of such license. The IP cut-off date occurred on January 30, 2018. Under the Intellia License Agreement, each party is responsible for 30% of the other party's expenses for prosecution and maintenance of the licensed intellectual property. For the three months ended March 31, 2020 and 2021, the Company reimbursed Intellia less than $0.1 million, which was recorded as general and administrative expenses in the condensed consolidated statements of operations and comprehensive loss. During the three months ended Month 31, 2020 and 2021, Intellia reimbursed the Company $0.4 million and $0.5 million (including reimbursement for a portion of the patent prosecution and maintenance costs of the CVC IP paid to UC), which was recorded as a reduction of general and administrative expenses in the condensed consolidated statements of operations and comprehensive

loss. The term of the Intellia License Agreement continues for the life of the licensed patents and patent applications; provided, however, that either party may terminate upon the occurrence of certain events.

Pioneer Hi-Bred International, Inc. (now Corteva Agriscience)

On July 13, 2015, the Company and Pioneer Hi-Bred International, Inc. ("Pioneer") (now Corteva Agriscience), then a DuPont company ("DuPont"), entered into an Amended and Restated Collaboration and License Agreement, as amended (the "Pioneer Agreement"). Under the terms of the Pioneer Agreement, the Company and Pioneer cross-licensed CRISPR intellectual property portfolios. Pioneer granted the Company an exclusive worldwide license, with the right to sublicense, to its CRISPR intellectual property in the field of research tools, as well as a non-exclusive worldwide license to such intellectual property in human and animal therapeutics, industrial biotechnology, certain agriculture segments, and other fields; and the Company granted Pioneer an exclusive worldwide license, with the right to sublicense, to its CRISPR intellectual property in a defined field of agriculture relating to specified row crops, as well as a non-exclusive worldwide license to such intellectual property in other agricultural applications, industrial biotechnology, nutrition and health and other fields. The Pioneer Agreement continues until the expiration, abandonment or invalidation of the last patent or patent application within the licensed intellectual property; provided, however, that the parties may terminate the Pioneer Agreement by mutual consent or either party may unilaterally terminate the Pioneer Agreement in the event of an uncured breach of a payment obligation, bankruptcy, or failure to maintain or own licensed intellectual property by the other party in the event the non-breaching party is materially adversely affected by such failure. The Company is obligated to pay low-single-digit percent royalties to Pioneer for the sales of the Company's products in the research tools field as well as certain sublicensing revenue in that field. The Company is eligible to receive milestone payments from Pioneer in the event certain regulatory and commercial milestones are met, for a total of up to $22.4 million, related to specified row crops as well as receiving low-single-digit percent royalties for sales of defined agricultural products and certain sublicensing revenue in that field. Through March 31, 2021, the Company received $0.3 million in milestone payments from Pioneer.

Under the Pioneer Agreement, the Company and Pioneer also entered into a three-year collaboration, funded by Pioneer, which ended in 2016. Initially, Pioneer owned the patents and patent applications developed under the collaboration and granted the Company an exclusive license thereto in the fields of research tools and therapeutics.

In December 2020, the Company and Pioneer entered into an amendment to the Pioneer Agreement under which Pioneer assigned to the Company the chRDNA patent family developed under the research collaboration, and the Company paid Pioneer an upfront payment of $0.5 million. The Company considered the payment to Pioneer in accordance with revenue recognition guidance and accounted for it as a reduction of the licensing and collaboration revenue within the condensed consolidated statements of operations and comprehensive loss. In addition to the upfront payment, the Company is obligated to pay 100% patent prosecution and maintenance costs going forward; up to $2.8 million in regulatory milestones for therapeutic products developed by the Company, its affiliates, and licensees; up to $20.0 million in sales milestones over a total of four therapeutics products sold by the Company, its affiliates, and licensees; and a low-single-digit percentage of sublicensing revenues received by the Company for licensing the chRDNA patent family after December 2020. During the three months ended March 31, 2021, the Company incurred $0.8 million of sublicensing fees, which was recorded as a research and development expense in its condensed consolidated statement of operations and comprehensive loss.

DuPont made equity investments at fair market value in the Company as part of the Company's Series A, A-1, and B convertible preferred stock financings.

Genus plc

On May 12, 2016, the Company entered into a Research Collaboration and License Agreement, as amended (the "Genus Agreement") with Genus plc ("Genus") under which the Company granted Genus an exclusive worldwide license to certain CRISPR-Cas9 technology for the introduction of genetic traits into cattle and pigs raised to produce protein primarily for human consumption; provided, however, that at the end of the four-year research collaboration, Genus was required to select a specified number of licensed products and the license is now limited to those particular products. The Genus Agreement continues until the expiration, abandonment, or invalidation of the last patent or patent application within the licensed patent rights; provided, however, that each party may terminate the Genus Agreement upon the occurrence of certain events, and Genus may terminate the Genus Agreement at its sole discretion upon written notice. In addition to an upfront payment received, the Company is eligible to receive milestone payments from Genus in the event certain regulatory and commercial milestones are met, for a total of $10.0 million. The Company will also be eligible to receive either low- to mid-single-digit percent royalties or low-single to low-double-digit percent royalties on net sales of licensed products.

The Company and Genus entered into a four-year research collaboration, which was funded by Genus. The collaboration ended in May 2020. During the three months ended March 31, 2020, the Company recognized revenue of $0.6 million related to the Genus Agreement, respectively. No revenue was recognized in relation with the Genus Agreement for the three months ended March 31, 2021.

Genus made an equity investment in the Company's Series B convertible preferred stock at fair market value.

Private Company License Agreement

On May 15, 2020, the Company entered into an Exclusive License Agreement, as amended, with a related party private company ("Private Company License Agreement"), under which the Company granted the private company an exclusive worldwide license under certain intellectual property rights and know-how in a defined field.

The Company is eligible to receive milestone payments for licensed products following the first commercial sale of each such licensed product in each of the United States and the first European country in which each such licensed product is sold by the private company. The private company may select one of several milestone payment amounts for each licensed product, which then dictates the applicable royalty rate for net sales of licensed products. The Company is also eligible to receive a percentage of sublicensing revenues earned by the private company.

The Private Company License Agreement will continue in force and effect until the expiration, abandonment, or invalidation of the last patent or patent application within the licensed patent rights. The Private Company License Agreement may be terminated during the term by either party for an uncured material breach or bankruptcy. Additionally, the private company may terminate the Private Company License Agreement upon 90 days' written notice to the Company.

As consideration for the exclusive license, the private company issued to the Company 7,500,000 shares of convertible preferred stock with an estimated fair value of $7.5 million, which was the price paid for similar shares by another investor, and was an arm's length transaction. The Company accounted for the grant of license as a contract with a customer under ASC 606 and recognized $7.5 million as license and collaboration revenue in its condensed consolidated statements of operations and comprehensive loss for the year ended December 31, 2020. No revenue was recognized in relation to the agreement for the three months ended March 31, 2020 and 2021.

On May 15, 2020, the Company entered into a separate option agreement under which it granted the private company a three-year option to negotiate an exclusive, royalty-bearing, worldwide license in a defined field to the CVC IP and certain other CRISPR-Cas9 patent rights controlled by the Company. The Company received a $50,000 upfront option payment and may receive annual option fees and an option exercise fee. The Company recorded the upfront payment received in long-term deferred revenue in the condensed consolidated balance sheet as of December 31, 2020 and March 31, 2021.

Collaboration and License Agreement with AbbVie

On February 9, 2021, the Company entered into a Collaboration and License Agreement with AbbVie Manufacturing Management Unlimited Company ("AbbVie") ("the AbbVie Agreement"). The collaboration is based on the selection and use of targets under programs, each referred to as a Program Slot (which may include one target or, for a dual CAR-T product, two targets), to develop collaboration CAR-T products (and corresponding licensed products). For each of AbbVie's two Program Slots (or up to four Program Slots, if AbbVie elects to expand the number as discussed below), the Company will collaborate to identify and develop one or more collaboration allogeneic CAR-T products directed toward the single cancer target or target combination chosen by AbbVie and as described in an applicable research plan, utilizing the Company's Cas12a chRDNA genome-editing and cell therapy technologies. The Company granted AbbVie an exclusive (even as to the Company), royalty-bearing, worldwide license, with the right to grant sublicenses, under the Company's Cas12a chRDNA and cell therapy intellectual property (as well as certain genome-editing technology that the Company may acquire in the future) and intellectual property that may be developed under the collaboration, solely for AbbVie to develop, commercialize, manufacture, and otherwise exploit the collaboration CAR-T products in the field of human diagnostics, prophylactics and therapeutics. Under the terms of the AbbVie Agreement, the Company will conduct certain preclinical research, development, and manufacturing activities under the collaboration, including certain activities for the manufacture and supply of licensed product for AbbVie's phase 1 clinical studies, and AbbVie will reimburse the Company for all such activities (including reimbursement for time spent by Company's employees at a designated FTE rate). The duration of the collaboration is not fixed. Under the terms of the AbbVie Agreement, AbbVie has selected its initial targets and has reserved six additional targets, which may be used or substituted into the two Program Slots or used for the third or fourth Program Slots if AbbVie expands the number of Program Slots during the collaboration.

During the collaboration, AbbVie may expand from two Program Slots to a total of four Program Slots by paying the Company an additional $15.0 million for each such Program Slot, provided that AbbVie must make such payment within the earlier of (a) 60 calendar days following completion of the phase 1 clinical studies for the initial collaboration CAR-T and (b) December 31, 2025. Under the terms of the AbbVie Agreement, the Company is eligible to receive up to $150.0 million in future developmental, regulatory, and product launch milestones for each Program Slot and up to $200.0 million in commercial milestones for each Program Slot. The Company is also eligible to receive global tiered royalties on net sales of licensed products sold by AbbVie, its affiliates, and sublicensees in the high-single-digit to low-teens percent range, subject, in certain instances, to various reductions.

The term of the AbbVie Agreement will continue in force and effect until the date of expiration of the last royalty term of the last country in which a licensed product is exploited. On a licensed product-by-licensed product and country-by-country basis, the royalty term is the period of time beginning on the first commercial sale of a licensed product in a country and ending on the latest of (a) the expiration, invalidation, revocation, cancellation, or abandonment date of the last Company's patent that includes a valid claim that claims (i) the collaboration CAR-T product in such licensed product, or (ii) the method of making the collaboration CAR-T product in such licensed product (in the case of (ii), only for so long as no biosimilar product is commercially available in such country), in such country; (b) 10 years from the first commercial sale of such licensed product in such country; and (c) expiration of regulatory exclusivity for such licensed product in such country. The AbbVie Agreement may be terminated during the term by either party for an uncured material breach or bankruptcy. Additionally, AbbVie may terminate the AbbVie Agreement, in its entirety or on a licensed

product-by-licensed product basis, effective immediately upon written notice to the Company, if AbbVie in good faith believes that it is not advisable for AbbVie to continue to exploit the collaboration on CAR-T products or licensed products as a result of a perceived serious safety issue. AbbVie may also terminate the AbbVie Agreement in its entirety, or, for any or no reason, upon 90 days' prior written notice to the Company.

The transaction price in the AbbVie Agreement associated with the two Program Slots consists of the $30.0 million upfront cash payment and the estimated variable consideration related to the Company's performance of preclinical, development, and manufacturing activities under the collaboration and the developmental, regulatory, and launch milestones. The Company constrains the estimated variable consideration if the Company assesses that it is probable that a significant reversal in the amount of cumulative revenue recognized may occur in future periods. The Company constrained all developmental, regulatory, and launch milestones as of March 31, 2021. The transaction price is re-evaluated in each reporting period and as changes in circumstances occur. The Company determined that the licenses it granted to AbbVie and the Company's participation in the joint governance committee are not capable of being distinct from the preclinical research, development, and manufacturing activities and therefore are combined into one performance obligation. The Company recognizes revenue based on the measure of progress using an estimated cost-based input method each reporting period.

The Company has not recognized any revenue for the three months ended March 31, 2021, as the Company has not incurred any costs related to its performance obligation under the AbbVie Agreement. The Company recognized short-term deferred revenue in the amount of $5.1 million and long-term deferred revenue in the amount of $24.9 million related to the upfront cash payment in the condensed consolidated balance sheet as of March 31, 2021.

5. Revenue

Disaggregation of Revenue

The Company disaggregates revenue by geographical market based on the location of research and development activities of its licensees. The following is a summary of revenue by geographic location for the three months ended March 31, 2020 and 2021 (in thousands):

	Three Months Ended March 31,	
	2020	2021
United States	$ 1,687	$ 1,475
Rest of world	14	111
Total	$ 1,701	$ 1,586

During the three months ended March 31, 2020, $1.1 million of revenue recognized by the Company related to performance obligations satisfied at a point in time, and $0.6 million of revenue recognized by the Company was related to performance obligations satisfied over time.

During the three months ended March 31, 2021, all of the $1.6 million of revenue recognized by the Company related to performance obligations satisfied at a point in time. No revenue related to performance obligations satisfied over time was recognized during the three months ended March 31, 2021.

Contract Balances

Accounts receivable relate to the Company's right to consideration for performance obligations completed (or partially completed) for which the Company has an unconditional right to consideration. The Company's accounts receivable balances represent amounts that are billed to licensees with invoices outstanding as of the period end.

Contract assets are rights to consideration in exchange for a license that the Company has transferred to a customer when such right is conditional on something other than the passage of time. The Company's contract asset balances represent royalties and milestones that are unbilled as of the period end.

Contract liabilities consist of deferred revenue and relate to amounts invoiced to or advance consideration received from customers, which precede the Company's satisfaction of the associated performance obligation(s). The Company's deferred revenue primarily results from upfront payments received relating to performance obligations that are satisfied over time related to the AbbVie Agreement. The remaining deferred revenue relates to upfront payments received under license agreements that also include non-refundable annual license fees, which are accounted for as material rights for license renewals and are recognized at the point in time the annual license fee is paid by the licensee and the renewal period begins.

The following table presents changes in the Company's contract assets and liabilities during the three months ended March 31, 2021 (in thousands):

	Balance at December 31, 2020	Additions	Deductions	Balance at March 31, 2021
Accounts receivable	$ 150	$ 2,533	$ (2,607)	$ 76
Contract assets:				
Unbilled accounts receivable	$ 1,328	$ 973	$ (1,328)	$ 973
Contract liabilities:				
Deferred revenue, current and long-term	$ 1,098	$ 30,580	$ (616)	$ 31,062

Unbilled accounts receivable decreased during the three months ended March 31, 2021 primarily due to billing of earned royalties accrued as of December 31, 2020.

Deferred revenue increased during the three months ended March 31, 2021 due to recognition of $30.0 million in deferred revenue related to the AbbVie Agreement (Note 4).

During the three months ended March 31, 2020 and 2021, the Company recognized $0.6 million and $0.1 million of revenues, respectively, that were included in the opening contract liabilities balance.

Transaction Prices Allocated to the Remaining Performance Obligations

Remaining unsatisfied performance obligations represent in aggregate the amount of a transaction price that has been allocated to performance obligations not delivered, or only partially undelivered, as of the end of the reporting period. The value of transaction prices allocated to remaining unsatisfied performance obligations as of March 31, 2021 was approximately $61.3 million. The Company expects to recognize approximately $5.3 million of remaining performance obligations as revenue in the next 12 months, and the remainder thereafter.

Capitalized Contract Acquisition Costs and Fulfillment Cost

The Company did not incur any expenses to obtain license and collaboration agreements and costs to fulfill those contracts do not generate or enhance resources of the Company. As such, no costs to obtain or fulfill a contract have been capitalized in any period.

6. Balance Sheet Items

Other receivables consisted of the following at (in thousands):

	December 31, 2020	March 31, 2021
Patent cost reimbursements	$ 3,672	$ 4,771
Other	10	5
Total	$ 3,682	$ 4,776

Prepaid expenses and other current assets consisted of the following at (in thousands):

	December 31, 2020	March 31, 2021
Prepaid income taxes	$ 1,479	$ 1,479
Prepaid contract manufacturing costs	954	1,617
Other	760	1,080
Total	$ 3,193	$ 4,176

Property and equipment, net, consisted of the following at (in thousands):

	December 31, 2020	March 31, 2021
Furniture and equipment	$ 117	$ 117
Computer equipment	263	263
Lab equipment	5,038	5,135
Leasehold improvements	1,180	1,180
	6,598	6,695
Less: accumulated depreciation and amortization	(3,096)	(3,315)
Property and equipment, net	$ 3,502	$ 3,380

Depreciation and amortization expense related to property and equipment was $0.2 million for the three months ended March 31, 2020 and 2021.

Accrued expenses and other current liabilities consisted of the following at (in thousands):

	December 31, 2020	March 31, 2021
Accrued patent expenses	$ 5,087	$ 7,941
Income taxes payable	5	5
Accrued sublicensing fees	402	1,420
Accrued employee compensation and related expenses	2,081	880
Accrued research and development expenses	581	688
Credit card liability	193	565
Other	624	1,664
Total	$ 8,973	$ 13,163

7. Related Party Transactions

Amended and Restated Collaboration and License Agreement with Pioneer

As of December 31, 2020, DuPont held more than 10% of voting interest in the Company and Pioneer is, therefore, considered a related party. See Note 4 for more details.

Scientific Advisory Board Payments

Dr. Jennifer A. Doudna, a co-founder and significant shareholder of the Company, received compensation for participating on the Company's SAB. During the three months ended March 31, 2020 and 2021, the Company paid Dr. Doudna less than $0.1 million for her participation on the SAB.

Officer Promissory Note

In November 2018, the Company's President and Chief Executive Officer entered into a promissory note with the Company for $1.1 million, as a means to provide liquidity without triggering a taxable event. The note bears interest at a rate of 3.04%, compounded annually, and is payable in five years, together with principal and accrued interest. The promissory note is secured by 225,410 shares of Caribou common stock owned by the President and Chief Executive Officer and has been determined to be non-recourse for accounting purposes and, as such, the issuance of the promissory note is effectively the grant of a new share option. A one-time stock compensation charge of $0.7 million was recorded as general and administrative expenses during the year ended December 31, 2018. The promissory note was still outstanding as of December 31, 2020 and March 31, 2021.

8. Promissory Note

On May 6, 2020, the Company entered into a promissory note with WebBank (the "Lender") pursuant to the Paycheck Protection Program ("PPP") administered by the Small Business Administration ("SBA") under the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") for a total amount of $1.6 million ("PPP Loan").

The PPP Loan had a two-year term and bore interest at a stated rate of 1.0% per annum, accrued monthly, beginning on the date the PPP Loan is issued by the Lender. Monthly principal and interest payments, less the amount of any potential forgiveness, commenced on the monthly payment date after which the SBA has notified the Lender of the forgiveness determination or, in the case of Lender's determination, beginning on the monthly payment date after the period for which the Company's right to request SBA review of such determination has lapsed on which a forgiveness decision is received from the Lender.

The Company did not provide any collateral or guarantees for the PPP Loan, nor did the Company pay any facility charge to obtain the PPP Loan. The PPP Loan provided for customary events of default, including, among others, those relating to failure to make payment, bankruptcy, breaches of representations, and material adverse effects. The Company may prepay the principal of the PPP Loan at any time without incurring any prepayment charges.

On May 22, 2021, the PPP Loan was forgiven in full by the SBA.

9. Commitments and Contingencies

Facility Lease Agreements

The Company leases laboratory and office space under non-cancellable operating agreements. On March 31, 2021, the Company entered into a ten-year lease agreement, which superseded and replaced its prior lease, as amended, and included additional office and laboratory space located within the same building in Berkeley, California. The lease agreement contains a renewal option for an additional term of five years. Monthly base rent under the lease agreement amounts to $0.3 million, subject to annual escalation from 3.1% to 3.5%.

The Company records rent expense on a straight-line basis over the term of the leases. For tenant improvement allowances funded by landlord incentives, the Company records a deferred lease incentive liability in accrued expenses and other liabilities and amortizes the deferred lease incentive liability as a reduction to rent expense on the condensed consolidated statements of operations and comprehensive loss over the term of the applicable lease. As of December 31, 2020 and March 31, 2021, the Company has recorded $0.6 million related to the required security deposits in other assets, long-term, in the condensed consolidated balance sheets.

As of March 31, 2021, future minimum lease payments under the leases are as follows (in thousands):

Remainder of 2021	$ 2,535
2022	3,485
2023	3,596
2024	3,708
2025	3,627
Thereafter	27,379
Total	$44,330

Rent expense was $0.7 million and $0.6 million for the three months ended March 31, 2020 and 2021, respectively.

Capital Lease

The Company has accounted for certain leased equipment as a capital lease due to the ownership of such equipment transferring to the Company at the end of the lease term. As of December 31, 2020, the total capital lease obligation amounted to $0.1 million, which was included in the current portion of the capital lease obligation in the accrued expenses and other current liabilities and the non-current portion of the capital lease in other liabilities within the condensed consolidated balance sheets. As of March 31, 2021, the capital lease obligation was repaid in full and the Company did not have any remaining future minimum lease payments related to this capital lease.

Research and Development Agreements

The Company enters into various agreements in the ordinary course of business, such as those with suppliers, contract research organizations, contract management organizations, clinical trial sites, and the like. These agreements provide for termination at the request of either party with less than one-year notice and are, therefore, cancellable contracts and, if cancelled, are not anticipated to have a material effect on the condensed consolidated financial condition, results of operations, or cash flows of the Company.

Guarantees and Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for certain indemnifications. The Company’s exposure under these agreements is unknown because any such claims may be made against the Company in the future. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of December 31, 2020 and March 31, 2021, the Company does not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

Intellia Arbitration

On October 16, 2018, Intellia initiated an arbitration proceeding with JAMS asserting that the Company had violated the terms and conditions of the Intellia License Agreement. The arbitration involves whether two patent families relating, respectively, to CRISPR-Cas9 chRDNAs and Cas9 scaffolds are included in the Intellia

License Agreement. On September 19, 2019, the parties received an interim award from the arbitration panel ruling that the two patent families are included in the Intellia License Agreement, but the arbitration panel granted the Company an exclusive leaseback to Cas9 chRDNAs under economic terms to be negotiated by the parties. On February 6, 2020, the arbitration panel clarified that the leaseback relates solely to the Company's CB-010 program and instructed the parties to negotiate economic terms based on a leaseback of that scope. The arbitration panel has retained jurisdiction of the dispute. The Company has not concluded its negotiations with Intellia. In the event that the parties are unable to reach economic terms, the arbitration panel may issue a final decision determining the economic terms of the leaseback agreement. The final outcome of the arbitration and its financial impact on the Company cannot be determined at this time.

10. Convertible Preferred Stock

The authorized, issued, and outstanding shares of the convertible preferred stock and liquidation preferences as of December 31, 2020 are as follows (in thousands, except for share amounts):

Series	Authorized Shares	Outstanding Shares	Liquidation Preference	Carrying Value
Series A	1,576,342	1,576,342	$ 3,550	$ 3,452
Series A-1	3,004,124	3,004,124	8,000	7,901
Series B	3,186,116	3,186,116	30,070	29,970
	7,766,582	7,766,582	$ 41,620	$ 41,323

The authorized, issued, and outstanding shares of the convertible preferred stock and liquidation preferences as of March 31, 2021, are as follows (in thousands, except for share amounts):

Series	Authorized Shares	Outstanding Shares	Liquidation Preference	Carrying Value
Series A	1,576,342	1,576,342	$ 3,550	$ 3,452
Series A-1	3,004,124	3,004,124	8,000	7,901
Series B	3,186,116	3,186,116	30,070	29,970
Series C	6,664,040	6,663,940	115,000	108,827
	14,430,622	14,430,522	$ 156,620	$ 150,150

The rights, preferences, and privileges of the Series A, Series A-1, Series B, and Series C convertible preferred stock as of December 31, 2020 and March 31, 2021, were as follows:

Dividends

The Company shall not declare, pay, or set aside any dividends on shares of any other class or series of capital stock of the Company, other than dividends on shares of common stock payable in shares of common stock, unless the holders of the convertible preferred stock then outstanding shall first receive, or simultaneously receive, in order of priority first to Series C convertible preferred stock-holders, then to Series B convertible preferred stock-holders, then to Series A convertible preferred stock-holders and the Series A-1 preferred convertible stock-holders, and finally to common stock. The dividend on each outstanding share of convertible preferred stock equals to the greater of (i) $0.18 per share of Series A preferred stock, (ii) $0.213 per share of Series A-1 preferred stock, (iii) $0.76 per share of Series B preferred stock, subject to appropriate adjustment in the event of any stock dividend, stock split, or other similar recapitalization, (iv) $1.38 per share of Series C preferred stock, or (v) the dividend's amount payable on such share on as-converted to common stock basis. No dividends have been declared to date.

Conversion

Convertible preferred stock is convertible, at the option of the holder, at any time, into fully paid, non-assessable shares of common stock at an initial conversion ratio of one-to-one.

The convertible preferred stock will automatically convert into common stock, at the then-applicable conversion rate, upon the earliest of (i) the closing of a firm-commitment underwritten public offering of the Company's common stock pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended, at a price of at least $21.572 per share, resulting in at least $50.0 million of gross proceeds to the Company; (ii) the consent of at least a majority of the then outstanding shares of the preferred stock, voting together as a single class on as-converted to common stock basis, the holders of a majority of the outstanding Series B convertible preferred stock, consenting together as a single class on an as converted to common stock basis (unless the majority vote of the preferred stock referenced above is obtained in connection with a firm-commitment underwritten public offering resulting in at least $50.0 million of gross proceeds at a price of at least $14.1569), and the holders of at least two-thirds of the outstanding Series C convertible preferred stock, consenting together as a single class on an as converted to common stock basis; or (iii) the closing of a Qualified SPAC transaction, resulting in the public company surviving or resulting from the transaction has available cash immediately after consummation of the transaction of at least $50.0 million of gross proceeds to the Company and whereby outstanding Company's shares are exchanged for or otherwise converted into securities that are publicly listed on a securities exchange, and the aggregate value of such securities received with respect to each share of Series C preferred stock (or the common stock issuable upon conversion of one share of Series C Preferred Stock) is equal to at least $21.572 per share.

Voting Rights

The holders of convertible preferred stock are entitled to that number of votes on all matters presented to stockholders equal to the number of shares of common stock then-issuable upon conversion of such preferred stock.

Liquidation

In the event of any sale of substantially all of the assets, a merger, or a liquidation, dissolution, or winding up of the Company, as defined in the Company's certificate of incorporation, the holders of Series A, A-1, Series B, and Series C convertible preferred stock will be entitled to receive in preference to the holders of common stock an amount per share equal to the original issue price of $2.252, $2.663, $9.4379, and $17.257 per share, respectively, as adjusted for stock splits, combinations, and reorganizations, plus declared and unpaid dividends, if any. Series C holders will receive their liquidation preference and any declared but unpaid dividends before any distribution is made to Series B, Series A, and Series A-1 holders. Series B holders will receive their liquidation preference and any declared but unpaid dividends before any distribution is made to Series A and A-1 holders. Series A and A-1 holders will receive their liquidation preference and any declared but unpaid dividends ratably before any distribution is made to common holders. After distributions to all preferred stockholders of all preferential amounts, the remaining assets of the Company will be distributed among the holders of shares of preferred stock and common stock on a pro rata basis based on the number of shares held by each holder, treating the preferred stock on an as-converted basis immediately prior to such sale of assets, merger, or liquidation, dissolution, or winding up.

Redemption

The Company's convertible preferred stock is not redeemable at the option of the holder thereof. Upon the occurrence of certain change in control events that are outside of the Company's control, including liquidation, sale or transfer, holders of the convertible preferred stock can effectively cause redemption for cash. As a result, the Company classified the convertible preferred stock as mezzanine equity on the condensed consolidated balance sheets as the stock is contingently redeemable.

11. Common Stock

Common stockholders are entitled to dividends when and if declared by the Company's Board of Directors and after any convertible preferred share dividends are fully paid. The holder of each share of common stock is entitled to one vote. As of March 31, 2021, the Company has never declared a dividend.

Common stock reserved for future issuance, on an as converted basis, consists of the following:

	As of December 31, 2020	As of March 31, 2021
Preferred stock, issued and outstanding	7,766,582	14,430,522
Stock options, issued and outstanding	2,486,559	3,005,259
Stock options, authorized for future issuance	320,312	949,632
Restricted stock awards	3,300	—
Total	10,576,753	18,385,413

12. Stock Option Plan

In 2012, the Company adopted a 2012 Stock Option and Issuance Plan (the "2012 Plan"), which allowed for the granting of incentive stock options ("ISOs"), non-qualified stock options ("NSOs"), and restricted stock awards ("RSAs") to the Company's employees, Board of Directors, and consultants. The Company granted a total 250,000 stock options under the 2012 Plan until the Company adopted the 2013 Equity Incentive Plan (as amended, the "2013 Plan").

The 2013 Plan allows for the granting of ISOs and NSOs to the Company's employees, Board of Directors, and consultants. ISOs may be granted only to the Company's employees, including officers and directors who are also employees. NSOs may be granted to employees, consultants, and non-employee directors.

Stock options under the 2013 Plan may be granted at prices no less than 100% of the estimated fair value of the common shares on the date of grant, as determined by the Company's Board of Directors, with a maximum term of 10 years; provided, however, that the exercise price of an ISO or an NSO granted to a 10% holder of outstanding shares shall not be less than 110% of the estimated fair value of the shares on the date of grant and may only be granted with a term of five years. In general, the Company's ISO grants vest over four years, with 25% of the option vesting after a one-year cliff and the remainder vesting monthly thereafter. The vesting periods for the Company's NSO grants vary depending upon the length of service provided to the Company and such grants vested ratably from three months to two years.

As of March 31, 2021, a total of 3,954,891 shares of common stock are authorized for issuance and 949,632 shares are available for future grant under the 2013 Plan.

The following table summarizes stock option activity for employees and non-employees during the three months ended March 31, 2021:

	Shares Available to Grant	Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (a)
Outstanding at December 31, 2020	320,312	2,486,559	$ 2.97	5.3	$ 6,929
Addition—Option pool	1,469,590				
Options granted	(858,682)	858,682	$ 7.47	10.0	
Options exercised	—	(321,570)	$ 1.75	3.6	
Options cancelled or forfeited	18,412	(18,412)	$ 4.69	—	
Outstanding at March 31, 2021	949,632	3,005,259	$ 4.38	6.7	$ 9,292
Exercisable at March 31, 2021		1,513,860	$ 2.39	4.1	$ 7,693
Vested and expected to vest at March 31, 2021		3,005,259	$ 4.38	6.7	$ 9,292

(a) The aggregate intrinsic value is presented in thousands and is presented in thousands and is calculated as the difference between the stock options exercise price and the estimated fair value of the underlying common stock at March 31, 2021.

The following table summarizes information about stock options outstanding for employees and non-employees as of March 31, 2021:

Exercise Prices	Shares Outstanding	Weighted-Average Remaining Contractual Term of Shares Outstanding (years)	Shares Exercisable	Weighted Average Remaining Contractual Term of Shares Exercisable (years)
$ 0.10	250,000	0.3	250,000	0.3
$ 0.43	145,000	1.1	145,000	1.1
$ 0.51	131,506	3.7	131,506	3.7
$ 0.72	205,000	1.6	205,000	1.6
$ 2.17	60,000	4.6	60,000	4.6
$ 2.94	86,108	4.6	86,108	4.6
$ 3.29	149,917	6.4	134,450	6.4
$ 4.88	828,006	7.9	410,464	7.5
$ 5.19	216,040	9.3	39,145	9.2
$ 5.37	75,000	2.2	51,562	2.2
$ 7.47	858,682	10.0	625	10.0
	3,005,259		1,513,860	

The Company has recorded stock-based compensation expenses related to employee and non-employee stock options granted in the condensed consolidated statements of operations and comprehensive loss as follows for the years ended March 31, 2020 and 2021 (in thousands):

	Three Months Ended March 31,	
	2020	2021
Research and development	$ 162	$ 197
General and administrative	75	146
Total	$ 237	$ 343

Stock-based compensation expenses related to employees were $0.2 million and $0.3 million for the three months ended March 31, 2020 and 2021, respectively. Stock-based compensation expenses related to non-employees were less than $0.1 million for the three months ended March 31, 2020 and 2021, respectively.

Grant Date Fair Value

During the three months ended March 31, 2020, the Company granted 55,040 stock options to employees (no options were granted to non-employees) with weighted average grant date fair value of $2.96. During the three months ended March 31, 2021, the Company granted 858,682 stock options to employees and non-employees with weighted average grant date fair value of $4.97.

The Company estimated the fair value of each employee and non-employee stock option award on the grant date using the Black-Scholes option-pricing model based on the following assumptions for the three months ended March 31:

	2020	2021
Volatility	74.8% to 74.9%	76.4% to 76.5%
Expected term (in years)	5.7 to 6.0	6.0 to 6.1
Risk free interest rate	0.7%	1.1% to 1.2%
Expected dividend yield	0.0%	0.0%

As of March 31, 2021, there was $6.0 million of unrecognized stock-based compensation expense related to employee and non-employee options that is expected to be recognized over a weighted-average period of 1.7 years.

13. 401(k) Savings Plan

In 2017, the Company established a defined-contribution savings plan under Section 401(k) of the Internal Revenue Code of 1986, as amended ("Tax Code"). The Company's 401(k) plan is available to all employees and allows participants to defer a portion of their annual compensation on a pretax basis subject to applicable laws. The Company also provides a 4% match for employee contributions up to a certain limit. During the three months ended March 31, 2020 and 2021, the Company contributed $0.1 million to the 401(k) plan.

14. Income Taxes

During the three months ended March 31, 2020, the Company recorded an income tax benefit of $1.2 million, representing an effective tax rate of 10.9%. The income tax benefit is primarily due to the recognition of net operating loss carrybacks under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, which generated a tax refund of taxes paid for the year ended December 31, 2018. No income tax benefit was recorded during the three months ended March 31, 2021.

15. Net Loss Per Share

The following table sets forth the computation of the basic and diluted net loss per share (in thousands, except share and per share amounts):

	Three Months Ended March 31,	
	2020	2021
Numerator		
Net Loss	$ (9,800)	$ (13,159)
Denominator:		
Weighted-average common shares outstanding used to compute net loss per share, basic and diluted	4,636,644	5,225,226
Net loss per share, basic and diluted	$ (2.11)	$ (2.52)

Since the Company was in a loss position for all periods presented, basic net loss per share is the same as diluted net loss per share for all periods as the inclusion of all common stock equivalents outstanding would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows as of December 31, 2020 and March 31, 2021:

	As of December 31, 2020	As of March 31, 2021
Convertible preferred stock	7,766,582	14,430,522
Stock options outstanding	2,486,559	3,005,259
Common shares subject to nonrecourse notes	225,410	225,410
	10,478,551	17,661,191

16. Subsequent Events

On April 23, 2021, the Company entered into a license agreement with an unrelated third party under which the Company granted a non-exclusive license to certain CRISPR-Cas9 patent rights controlled by the Company. The Company will receive an upfront cash payment of low-single-digit millions of dollars and a time-vesting warrant exercisable for shares of the third party's preferred stock. The Company has formed a new wholly-owned subsidiary for the purpose of holding this warrant.

On May 28, 2021, the Company granted 196,097 common stock options to the Company's employees and non-employees in accordance with Company's 2013 Plan.

On May 22, 2021, the PPP Loan was forgiven in full by the SBA. See Note 8 for more details.

On June 7, 2021, the officer promissory note was repaid in full, including $0.1 million of accrued interest. See Note 7 for more details.

The Company has evaluated subsequent events for condensed consolidated financial statements purposes occurring through June 11, 2021, the date when these condensed consolidated financial statements are available to be issued. Based on this evaluation, it was determined that, other than the events described above, no subsequent events occurred that would require recognition or disclosure in the condensed consolidated financial statements.

Through and including , 2021 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares

Common Stock

PROSPECTUS

BofA Securities

Citigroup

SVB Leerink

, 2021

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of common stock being registered. All amounts are estimates except for the SEC registration fee, the FINRA filing fee, and the Nasdaq Global Select Market listing fee:

Item	Amount paid or to be paid
SEC registration fee	$ *
FINRA filing fee	*
Nasdaq Global Select Market listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer Agent fees and expenses	*
Miscellaneous expenses	*
Total	$ *

* To be provided by amendment.

Indemnification of Directors and Officers.

As permitted by Section 102(b)(7) of the DGCL, we plan to include in our amended and restated certificate of incorporation a provision to eliminate the personal liability of our directors for monetary damages for breach of their fiduciary duties as directors, subject to certain exceptions. In addition, our amended and restated certificate of incorporation and bylaws will provide that we are required to indemnify our executive officers and directors under certain circumstances, including those circumstances in which indemnification would otherwise be discretionary, and we are required to advance expenses to our executive officers and directors as incurred in connection with proceedings against them for which they may be indemnified, in each case except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145(a) of the DGCL provides that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by them in connection with such action, suit, or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interest of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful. The termination of any action, suit, or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that their conduct was unlawful.

Section 145(b) of the DGCL provides that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by them in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made with respect to any claim, issue, or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

We have entered into indemnification agreements with our executive officers and directors. These indemnification agreements will provide broader indemnity rights than those provided under the DGCL and our amended and restated certificate of incorporation. These indemnification agreements are not intended to deny or otherwise limit third-party or derivative suits against us or our directors or officers, but to the extent a director or officer were entitled to indemnity or contribution under the indemnification agreement, the financial burden of a third-party suit would be borne by us, and we would not benefit from derivative recoveries against the director or officer. Such recoveries would accrue to our benefit but would be offset by our obligations to the director or officer under the indemnification agreement.

The underwriting agreement will provide that the underwriters are obligated, under certain circumstances, to indemnify our directors, officers, and controlling persons against certain liabilities, including liabilities under the Securities Act.

We maintain directors' and officers' liability insurance for the benefit of our directors and executive officers.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities sold by us since January 1, 2018.

Issuances of Capital Stock

In December 2020, we issued 370,845 shares of our common stock to MSKCC in connection with a licensing agreement.

In March 2021, we issued an aggregate of 6,663,940 shares of our Series C convertible preferred stock for aggregate consideration of $114,999,613 to 36 accredited investors.

No underwriters were used in the foregoing transactions. All sales of securities described above were made in reliance upon the exemption from registration provided by Section 4(a)(2) of the Securities Act or Rule 506 of Regulation D under the Securities Act for transactions by an issuer not involving a public offering.

Grants of Stock Options and Restricted Stock

In March 2018, we granted stock options to purchase an aggregate of 75,108 shares of our common stock at a weighted-average exercise price of $3.29 to employees and consultants.

In June 2018, we granted stock options to purchase an aggregate of 281,376 shares of our common stock at a weighted-average exercise price of $5.01 to employees and directors.

In September 2018, we granted stock options to purchase an aggregate of 126,040 shares of our common stock at a weighted-average exercise price of $4.88 to employees and consultants.

In November 2018, we granted stock options to purchase an aggregate of 108,080 shares of our common stock at a weighted-average exercise price of $4.88 to employees and consultants.

In March 2019, we granted stock options to purchase an aggregate of 185,897 shares of our common stock at a weighted-average exercise price of $4.88 to employees and consultants.

In June 2019, we granted stock options to purchase an aggregate of 69,950 shares of our common stock at a weighted-average exercise price of $4.88 to employees.

In October 2019, we granted stock options to purchase an aggregate of 332,520 shares of our common stock at a weighted-average exercise price of $4.88 to employees.

In November 2019, we granted stock options to purchase an aggregate of 26,000 shares of our common stock at a weighted-average exercise price of $4.88 to employees.

In March 2020, we granted stock options to purchase an aggregate of 55,040 shares of our common stock at a weighted-average exercise price of $4.88 to employees.

In June 2020, we granted stock options to purchase an aggregate of 153,850 shares of our common stock at a weighted-average exercise price of $5.19 to employees, directors, and consultants. Also in June 2020, we granted 2,500 shares of restricted common stock to a consultant.

In October 2020, we granted stock options to purchase an aggregate of 61,500 shares of our common stock at a weighted-average exercise price of $5.19 to employees. Also in October 2020, we granted 800 shares of restricted stock to a consultant.

In December 2020, we granted stock options to purchase an aggregate of 10,040 shares of our common stock at a weighted-average exercise price of $5.19 to employees.

In March 2021, we granted stock options to purchase an aggregate of 858,682 shares of our common stock at a weighted-average exercise price of $7.47 to employees and consultants.

In May 2021, we granted stock options to purchase an aggregate of 196,097 shares of our common stock at a weighted-average exercise price of $9.58 to employees and directors.

In June 2021, we granted stock options to purchase an aggregate of 297,211 shares of our common stock at a weighted-average exercise price of $9.58 to employees and directors.

The issuances of the above securities were exempt either pursuant to Rule 701 under the Securities Act, as transactions pursuant to compensatory benefit plans, or pursuant to Section 4(a)(2) of the Securities Act, as transactions by an issuer not involving a public offering.

Item 16. Exhibits and Consolidated Financial Statement Schedules.

(a) Exhibits

See the Exhibit Index included in this Registration Statement, which is incorporated by reference herein.

(b) Consolidated Financial Statement Schedules

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or interim condensed consolidated financial statements or notes thereto.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(a) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(b) The undersigned Registrant hereby undertakes that:

(i) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(ii) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

EXHIBIT INDEX

Exhibit Number	Exhibit Description
1.1*	Form of Underwriting Agreement
3.1	Fourth Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect
3.2*	Form of Amended Certificate of Incorporation of the Registrant to be effective upon the closing of this offering
3.3	Bylaws of the Registrant, as currently in effect
3.4*	Form of Amended and Restated Bylaws of the Registrant to be effective upon the closing of this offering
4.1	Second Amended and Restated Investors' Rights Agreement, dated March 2, 2021, by and among the Registrant and the investors listed therein
5.1*	Opinion of Reed Smith LLP
10.1†	Collaboration and License Agreement dated as of February 9, 2021, between the Registrant and AbbVie Manufacturing Management Unlimited Company
10.2†	Exclusive License Agreement dated as of November 13, 2020, by and between the Registrant and Memorial Sloan Kettering Cancer Center
10.3†	Sale and Assignment Agreement, dated as of January 31, 2020, by and between the Registrant and ProMab Biotechnologies, Inc.
10.4†	Amendment No. 1 to Sale and Assignment Agreement dated as of October 20, 2020, by and between the Registrant and ProMab Biotechnologies, Inc.
10.5†	Amendment No. 2 to Sale and Assignment Agreement dated as of December 15, 2020, by and between the Registrant and ProMab Biotechnologies, Inc.
10.6	Amendment No. 3 to Sale and Assignment Agreement dated May 5, 2020, by and between the Registrant and ProMab Biotechnologies, Inc.
10.7†	Amended and Restated Collaboration and License Agreement, dated as of July 13, 2015, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.8†	Amendment No. 1 to Amended and Restated Collaboration and License Agreement, dated as of January 21, 2016, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.9†	Amendment No. 2 to Amended and Restated Collaboration and License Agreement, dated as of July 18, 2016, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.10†	Amendment No. 3 to Amended and Restated Collaboration and License Agreement, dated as of March 13, 2017, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.11†	Amendment No. 4 to Amended and Restated Collaboration and License Agreement, dated as of June 26, 2017, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.12†	Amendment No. 5 to Amended and Restated Collaboration and License Agreement, dated as of May 25, 2018, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.13†	Amendment No. 6 to Amended and Restated Collaboration and License Agreement, dated as of June 2, 2019, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.14†	Amendment No. 7 to Amended and Restated Collaboration and License Agreement, dated as of December 18, 2020, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.15†	Amendment No. 8 to Amended and Restated Collaboration and License Agreement, dated as of December 18, 2020, by and between the Registrant and Pioneer Hi-Bred International, Inc.
10.16†	License Agreement dated as of July 16, 2014, by and between the Registrant and Intellia, LLC

Exhibit Number	Exhibit Description
10.17†	Amendment No. 1 to the License Agreement, dated February 2, 2016, by and between the Registrant and Intellia Therapeutics, Inc. as successor in interest to Intellia, LLC
10.18†	Addendum to License Agreement, dated as of February 2, 2016, by and between the Registrant and Intellia Therapeutics, Inc. as successor in interest to Intellia, LLC
10.19*†	Leaseback Agreement, dated June 16, 2021, by and between the Registrant and Intellia Therapeutics, Inc.
10.20†	Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement for a Programmable DNA Restriction Enzyme for Genome Editing, dated December 15, 2016, by and among the Registrant and the other parties thereto
10.21†	Exclusive License Agreement dated as of April 16, 2013, by and among the Registrant, The Regents of the University of California, and the University of Vienna
10.22†	Amendment No. 1 to the Exclusive License Agreement, dated April 16, 2013, by and among the Registrant, The Regents of the University of California, and the University of Vienna
10.23†	Amendment No. 2 to the Exclusive License Agreement, dated April 17, 2013, by and among the Registrant, The Regents of the University of California, and the University of Vienna
10.24†	Amendment No. 3 to the Exclusive License Agreement, dated April 16, 2021, by and among the Registrant, The Regents of the University of California, and the University of Vienna
10.25†	Memorandum of Understanding, dated March 14, 2019, by and among the Registrant, the University of Vienna, and the Regents of the University of California
10.26	Amended and Restated Office/Laboratory Lease, dated March 31, 2021, by and between the Registrant and 2929 Seventh St., LLC
10.27+	Officer Employment Agreement, dated as of June 30, 2017, by and between the Registrant and Rachel E. Haurwitz, Ph.D.
10.28+	Amendment No. 1 to Officer Employment Agreement, dated April 10, 2019, by and between the Registrant and Rachel E. Haurwitz, Ph.D.
10.29+	Salary Increase Letter, dated February 19, 2021, from the Registrant to Rachel E. Haurwitz, Ph.D.
10.30+*	Form of Officer Employment Agreement by and between the Registrant and Rachel E. Haurwitz, Ph.D. to be effective upon the closing of this offering
10.31+	Officer Employment Agreement, dated as of June 30, 2017, by and between the Registrant and Steven B. Kanner, Ph.D.
10.32+	Amendment No. 1 to Officer Employment Agreement, dated as of April 10, 2019, by and between the Registrant and Steven B. Kanner, Ph.D.
10.33+	Salary Increase Letter, dated June 14, 2019, from the Registrant to Steven B. Kanner, Ph.D.
10.34+*	Form of Officer Employment Agreement by and between the Registrant and Steven B. Kanner, Ph.D., to be effective upon the closing of this offering
10.35+	Officer Employment Agreement, dated as of June 30, 2017, between the Registrant and Barbara G. McClung, J.D.
10.36+	Amendment No. 1 to Officer Employment Agreement, dated as of April 10, 2019, by and between the Registrant and Barbara G. McClung, J.D.
10.37+	Salary Increase Letter dated as of June 14, 2019, from the Registrant to Barbara G. McClung, J.D.

Exhibit Number	Exhibit Description
10.38+*	Form of Officer Employment Agreement by and between the Registrant and Barbara G. McClung, J.D., to be effective upon the closing of this offering
10.39+	Officer Employment Agreement, dated as of February 8, 2021, between the Registrant and Jason V. O'Byrne, M.B.A.
10.40+*	Form of Officer Employment Agreement by and between the Registrant and Jason V. O'Byrne, M.B.A., to be effective upon the closing of this offering
10.41+	2013 Equity Incentive Plan of the Registrant, as amended and restated April 3, 2019
10.42+	Form of Stock Option Agreement under the 2013 Equity Incentive Plan, as amended and restated
10.43+	2012 Stock Option/Stock Issuance Plan of the Registrant
10.44+	Form of Stock Option Agreement under the 2012 Stock Option/Stock Issuance Plan
10.45*+	2021 Equity Incentive Plan of the Registrant
10.46*+	Form of Stock Option Agreement under the 2021 Equity Incentive Plan
10.47*+	2021 Employee Stock Purchase Plan
10.48	Promissory Note, dated November 27, 2018 made by Rachel E. Haurwitz, Ph.D. in favor of the Registrant
10.49	Pledge and Security Agreement, dated November 27, 2018, by and between the Registrant and Rachel E. Haurwitz, Ph.D.
10.50	Form of Indemnification Agreement between the Registrant and its directors and officers
10.51	Scientific Advisory Board Agreement, dated as of June 18, 2012, by and between the Registrant and Jennifer A. Doudna
10.52	Amendment No. 1 to Scientific Advisory Board Agreement, dated as of April 12, 2014, by and between the Registrant and Jennifer A. Doudna
10.53	Amendment No. 2 to Scientific Advisory Board Agreement, dated as of May 31, 2016, by and between the Registrant and Jennifer A. Doudna
10.54	Amendment No. 3 to Scientific Advisory Board Agreement, dated as of January 1, 2017, by and between the Registrant and Jennifer A. Doudna
10.55	Amendment No. 4 to Scientific Advisory Board Agreement, dated as of March 31, 2018, by and between the Registrant and Jennifer A. Doudna
10.56	Amendment No. 5 to Scientific Advisory Board Agreement, dated as of January 1, 2020, by and between the Registrant and Jennifer A. Doudna
10.57†	Scientific Advisory Board Agreement, dated January 1, 2017, by and between the Registrant and Jennifer A. Doudna
10.58†	Mutual Termination of the Scientific Advisory Board Agreement, dated March 17, 2018, by and between the Registrant and Jennifer A. Doudna
10.59	Series C Preferred Stock Purchase Agreement, dated March 2, 2021, by and among the Registrant and the parties listed therein
10.60	Third Amended and Restated Voting Agreement, dated March 2, 2021, by and among the Registrant and the parties listed therein
10.61	First Amendment to Third Amended and Restated Voting Agreement, dated March 29, 2021, by and among the Registrant and the parties listed therein

Exhibit Number	Exhibit Description
10.62	Second Amended and Restated Right of First Refusal and Co-Sale Agreement, dated March 2, 2021, by and among the Registrant and the parties listed therein
10.63	Public Offering Participation Rights Agreement, dated March 2, 2021, by and between the Registrant and PFM Health Sciences, LP
10.64	Public Offering Participation Rights Agreement, dated March 2, 2021, by and between the Registrant and Ridgeback Capital Investments LP
10.65	Public Offering Participation Rights Agreement, dated March 2, 2021, by and between the Registrant and Zone III Healthcare Holdings, LLC
21.1	List of Subsidiaries of the Registrant
23.1	Consent of Deloitte & Touche LLP
23.2*	Consent of Reed Smith LLP (included in Exhibit 5.1)
24.1	Power of Attorney (reference is made to the signature page to the Registration Statement)

* Indicates to be filed by amendment
\+ Indicates management contract or compensatory plan
† Indicates certain portions of this document that constitute confidential information have been redacted in accordance with Regulation S-K, Item 601(b)(10).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Berkeley, State of California, on this 1st day of July, 2021.

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President and Chief Executive Officer

POWER OF ATTORNEY

We the undersigned executive officers and directors of Caribou Biosciences, Inc., hereby severally constitute and appoint Rachel E. Haurwitz and Jason V. O'Byrne, and each of them singly, our true and lawful attorneys with full power to any of them, and to each of them singly, to sign for us and in our names in the capacities indicated below the registration statement on Form S-1 filed herewith and any and all pre-effective and post-effective amendments to said registration statement and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same with all exhibits thereto, and the other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in our name and behalf in our capacities as executive officers and directors to enable Caribou Biosciences, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Rachel E. Haurwitz Rachel E. Haurwitz	President and Chief Executive Officer and Director (*Principal Executive Officer*)	July 1, 2021
/s/ Jason V. O'Byrne Jason V. O'Byrne	Chief Financial Officer (*Principal Financial Officer*)	July 1, 2021
/s/ Ryan Fischesser Ryan Fischesser	Controller (*Principal Accounting Officer*)	July 1, 2021
/s/ Scott Braunstein Scott Braunstein	Director	July 1, 2021
/s/ Andrew Guggenhime Andrew Guggenhime	Director	July 1, 2021
/s/ Jeffrey Long-McGie Jeffrey Long-McGie	Director	July 1, 2021
/s/ Natalie R. Sacks Natalie R. Sacks	Director	July 1, 2021

FOURTH AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
CARIBOU BIOSCIENCES, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Caribou Biosciences, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "**General Corporation Law**"),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Caribou Biosciences, Inc., and that this corporation was originally incorporated as a Delaware corporation on October 28, 2011.

2. That this Fourth Amended and Restated Certificate of Incorporation, which restates and integrates and also further amends the provisions of this corporation's Third Amended and Restated Certificate of Incorporation, was duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law and by the written consent of the corporation's stockholders in accordance with Section 228 of the General Corporation Law.

3. That the Third Amended and Restated Certificate of Incorporation of this corporation is hereby amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Caribou Biosciences, Inc. (the "**Corporation**").

SECOND: The address of the Corporation's registered office in the State of Delaware is 3500 South DuPont Highway, City of Dover, County of Kent, Delaware 19901. The name of the registered agent at such address is Incorporating Services, Ltd.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "**General Corporation Law**").

FOURTH: The total number of shares of all classes of capital stock which the Corporation shall have authority to issue is 38,930,622, comprised of: (i) 24,500,000 shares of Common Stock, $0.0001 par value per share ("**Common Stock**"), and (ii) 14,430,622 shares of Preferred Stock, $0.0001 par value per share ("**Preferred Stock**"), 1,576,342 of which are hereby designated as "Series A Preferred Stock" (the "**Series A Preferred Stock**"), 3,004,124 of which are hereby designated as "Series A-1 Preferred Stock" (the "**Series A-1 Preferred Stock**"), 3,186,116 of which are hereby designated as "Series B Preferred Stock" (the "**Series B Preferred Stock**"), and 6,664,040 of which are hereby designated as "Series C Preferred Stock" (the "**Series C Preferred Stock**").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one (1) vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Corporation's certificate of incorporation, as may be amended from time to time (the "**Certificate of**

Incorporation") that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

The Preferred Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "sections" or "Sections" in this Part B of this Article Fourth refer to sections and Sections of Part B of this Article Fourth. As used herein, (a) "**Series A Original Issue Price**" shall mean $2.252 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock, (b) "**Series A-1 Original Issue Price**" shall mean $2.663 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-1 Preferred Stock, (c) "**Series B Original Issue Price**" shall mean $9.4379 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock, (d) "**Series C Original Issue Price**" shall mean $17.257 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock, and (e) "**Original Issue Price**" shall mean (i) with respect to the Series A Preferred Stock, the Series A Original Issue Price, (ii) with respect to the Series A-1 Preferred Stock, the Series A-1 Original Issue Price, (iii) with respect to the Series B Preferred Stock, the Series B Original Issue Price, and (iv) with respect to the Series C Preferred Stock, the Series C Original Issue Price.

1. Dividends.

1.1 The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation, including but not limited to dividends to the Series B Preferred Stock, Series A Preferred Stock, Series A-1 Preferred Stock (collectively, the "**Junior Preferred Stock**") and Common Stock (other than dividends on shares of Common Stock payable in shares of Common Stock), unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series C Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series C Preferred Stock in an amount at least equal to the greater of (a) 8% per annum of the Series C Original Issue Price, and (b) the amount of that dividend on such share of Series C Preferred Stock as would equal the product of (i) the dividend payable per share of Common Stock and (ii) the number of shares of Common Stock issuable upon conversion of such share of Series C Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend; provided that if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series C Preferred Stock pursuant to this Section 1.1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series C Preferred Stock dividend. The right to receive dividends on shares of Series C Preferred Stock pursuant to this Section 1.1 shall not be cumulative, and no right to dividends shall accrue to holders of Series C Preferred Stock by reason of the fact that dividends on said shares are not declared.

1.2 The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends payable on shares of Series C Preferred Stock pursuant to Section 1.1 and dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Junior Preferred Stock then outstanding shall first receive, or simultaneously receive, in the order of priority set forth below in Section 2.1, a dividend on each outstanding share of Junior Preferred Stock in an amount at least equal to the greater of (a) (i) $0.18 per share of Series A Preferred Stock, (ii) $0.213 per share of Series A-1 Preferred Stock, or

(iii) $0.76 per share of Series B Preferred Stock (in each case subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such series of Preferred Stock), and (b) the amount of that dividend on such share of Junior Preferred Stock as would equal the product of (i) the dividend payable per share of Common Stock and (ii) the number of shares of Common Stock issuable upon conversion of such share of Junior Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend; provided that if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Junior Preferred Stock pursuant to this Section 1.2 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Junior Preferred Stock dividend. The right to receive dividends on shares of Junior Preferred Stock pursuant to this Section 1.2 shall not be cumulative, and no right to dividends shall accrue to holders of Junior Preferred Stock by reason of the fact that dividends on said shares are not declared.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event (as defined below):

2.1.1 Payments to Holders of Series C Preferred Stock. The holders of shares of Series C Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series B Preferred Stock, Series A Preferred Stock, Series A-1 Preferred Stock or Common Stock, by reason of their ownership thereof, an amount per share equal to the Series C Original Issue Price, plus any dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series C Preferred Stock the full amount to which they shall be entitled under this Section 2.1.1, the holders of shares of Series C Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.1.2 Payments to Holders of Series B Preferred Stock. After the payment of all preferential amounts required to be made with respect to the holders of shares of Series C Preferred Stock in accordance with Section 2.1.1, the holders of shares of Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, before any payment shall be made to the holders of Series A Preferred Stock, Series A-1 Preferred Stock or Common Stock, by reason of their ownership thereof, an amount per share equal to the Series B Original Issue Price, plus any dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series B Preferred Stock the full amount to which they shall be entitled under this Section 2.1.2, the holders of shares of Series B Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.1.3 Payments to Holders of Series A Preferred Stock and Series A-1 Preferred Stock. After the payment of all preferential amounts required to be made with respect to the holders of shares of Series C Preferred Stock in accordance with Section 2.1.1 and the holders of shares of Series B Preferred Stock in accordance with Section 2.1.2, the holders of shares of Series A Preferred Stock and Series A-1 Preferred then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, on a *pari passu* basis, before any payment shall be made to the holders of Common Stock, by reason of their ownership thereof, an amount per share equal to the applicable Original Issue Price for such series, plus any dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series A Preferred Stock and Series A-1 Preferred the full amount to which they shall be entitled under this Section 2.1.3, the holders of shares of Series A Preferred Stock and Series A-1 Preferred, on a *pari passu* basis,

shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Distribution of Remaining Assets. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock in accordance with Section 2.1, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Preferred Stock and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to Common Stock pursuant to the terms of the Certificate of Incorporation immediately prior to such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event. The aggregate amount which a holder of one (1) share of a series of Preferred Stock is entitled to receive in respect of such share under Sections 2.1 and 2.2 is hereinafter referred to as the "**Liquidation Amount**" for such share.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless the holders of at least a majority of the outstanding shares of Preferred Stock, voting together as a separate class on an as converted to Common Stock basis, elect otherwise by written notice sent to the Corporation at least ten (10) days prior to the effective date of any such event; provided, however, the election to not treat such event as a Deemed Liquidation Event shall not apply to (x) the Series B Preferred Stock unless such electing holders include the holders of a majority of the then outstanding Series B Preferred Stock, voting or consenting together as a single class, or (y) the Series C Preferred Stock unless such electing holders include the holders of at least two-thirds (2/3^{rds}) of the then outstanding Series C Preferred Stock, voting or consenting together as a single class:

(a) a merger or consolidation in which

(i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; provided that, each of the following shall not constitute a "Deemed Liquidation Event": (A) any transaction or series of transactions for bona fide equity financing purposes in which cash is received by the Corporation or any successor or indebtedness of the Corporation is canceled or converted or a combination thereof, or (B) any transaction or series of related transactions solely for the purpose of effecting a change in the domicile of the Corporation; or

(b) (1) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries (including intellectual property) taken as a whole, or (2) the sale or disposition (whether by merger, consolidation or otherwise, and whether in a single transaction or series of related transactions) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries (including intellectual property) taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Section 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Section 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the ninetieth (90th) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (ii) if the holders of at least a majority of the then outstanding shares of Preferred Stock (voting as a separate class on an as-converted to Common Stock basis) so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by the General Corporation Law governing distributions to stockholders (the "**Available Proceeds**"), on the one hundred fiftieth (150th) day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the applicable Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall (1) first, ratably redeem each holder's shares of Series C Preferred Stock to the fullest extent of such Available Proceeds, and shall redeem the remaining shares as soon as it may lawfully do so under the General Corporation Law governing distributions to stockholders, (2) second, after all shares of Series C Preferred Stock have been redeemed, ratably redeem each holder's shares of Series B Preferred Stock to the fullest extent of such remaining Available Proceeds, and shall redeem the remaining shares as soon as it may lawfully do so under the General Corporation Law governing distributions to stockholders, and (3) third, after all shares of Series C Preferred Stock and Series B Preferred Stock have been redeemed, ratably redeem each holder's shares of Series A Preferred Stock and Series A-1 Preferred Stock, on a *pari passu* basis, to the fullest extent of such remaining Available Proceeds, and shall redeem the remaining shares as soon as it may lawfully do so under the General Corporation Law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Section 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

(c) On or before the redemption pursuant to Section 2.3.2(b), each holder of shares of Preferred Stock to be redeemed on such date, unless such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the written notice provided by the Corporation, and thereupon the redemption price for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Preferred Stock represented by a certificate are redeemed, a new certificate representing the unredeemed shares of Preferred Stock shall promptly be issued to such holder.

(d) If the written notice provided by the Corporation shall have been duly given, and if on the redemption date, the redemption price payable upon redemption of the shares of Preferred Stock to be redeemed on such date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that the certificates evidencing any of the shares of Preferred Stock so called for redemption shall not have been surrendered, and all rights with respect to such shares shall forthwith after such date terminate, except only the right of the holders to receive the redemption price without interest upon surrender of their certificate or certificates therefor.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such Deemed Liquidation Event shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation; provided, however, that any publicly traded securities to be distributed to stockholders shall be valued as follows:

(a) if the securities are then traded on a national securities exchange, then the value of the securities shall be deemed to be the average of the closing prices of the securities on such exchange over the ten (10) trading day period ending five (5) trading days prior to the distribution thereof; and

(b) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the distribution thereof.

In the event of a merger or other acquisition of the Corporation by another entity, the distribution date of securities, if any, shall be deemed to be the date such transaction closes.

2.3.4 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Section 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Section 2.3.4, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of a meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class on an as-converted to Common Stock basis.

3.2 Election of Directors. The holders of record of the shares of Series C Preferred Stock, exclusively and as a separate class, shall be entitled to elect two (2) directors of the Corporation (the "**Series C Preferred Directors**"), the holders of record of Series A Preferred Stock, Series A-1 Preferred Stock and Series B Preferred Stock, exclusively and as a single separate class on an as-converted to Common Stock basis, shall be entitled to elect one (1) director of the Corporation (the "**Series A/A-1/B Preferred Director;**" the Series A/A-1/B Preferred Director together with the Series C Preferred Directors then in office, the "**Preferred Directors**", and each of them, a "**Preferred Director**") (provided, however, that, for administrative convenience, the initial Preferred Directors may be appointed by the Board in connection with the approval of the initial issuance of Series C Preferred Stock without a separate action by such holders of Preferred Stock), the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation, and the holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class on an as-converted to Common Stock basis, shall be entitled to elect the balance of the total number of directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital

stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, as applicable, pursuant to the first sentence of this Section 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Section 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Section 3.2.

3.3 Preferred Stock Protective Provisions. At any time when shares of Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, such vote to be determined on an as-converted to Common Stock basis, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 amend, alter or repeal any provision of the Certificate of Incorporation or bylaws of the Corporation in a manner that adversely alters or changes the rights, preferences or privileges of the Preferred Stock;

3.3.2 increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of Preferred Stock (or any series thereof) or Common Stock;

3.3.3 authorize or create (by reclassification, merger or otherwise) or issue or obligate itself to issue any new class or series of equity security (including any security convertible into or exercisable for any equity security) having rights, preferences or privileges with respect to dividends, redemption or payments upon liquidation senior to or on a parity with any series of Preferred Stock;

3.3.4 enter into (a) any transaction or series of related transactions in which the Corporation's outstanding shares of capital stock are exchanged for or otherwise converted into securities that are publicly listed on a securities exchange (the "**Public Shares**"), including through a merger, acquisition, business combination, or similar transaction, in each case with a vehicle commonly known as a special purpose acquisition company (i.e., a blank check company with no operations) (a "**SPAC**" and such transaction a "**SPAC Transaction**") or (b) a Deemed Liquidation Event;

3.3.5 voluntarily liquidate or dissolve;

3.3.6 encumber or grant a security interest in all or substantially all of the assets of the Corporation in connection with an indebtedness of the Corporation, unless such encumbrance or security interest has received the prior approval of the Board of Directors, including the approval of a majority of the Preferred Directors;

3.3.7 any action that creates or results in the Corporation holding capital stock in any subsidiary that is not a wholly owned subsidiary or disposes of any subsidiary stock or all or substantially all of any subsidiary assets;

3.3.8 purchase or redeem or pay any dividend on any capital stock, other than repurchases pursuant to stock restriction agreements upon termination of a consultant, director or employee;

3.3.9 increase or decrease the authorized number of directors constituting the Corporation's Board of Directors;

3.3.10 approve or adopt any new equity incentive plan or increase the number of reserved shares of Common Stock issuable to employees, directors or consultants under any new or existing equity incentive plan;

3.3.11 enter into any transactions outside the ordinary course of business with any of the Corporation's executive officers, directors, stockholders or their affiliates or immediate family members (including any corporation, partnership, association or other organization of which any executive officer, director, stockholder or their affiliates or immediate family members is a director or officer, or in which such person holds greater than five percent (5%) of the outstanding capital stock), excluding employment compensation approved by the Corporation's Board of Directors and standard employee benefits made generally available to all employees; or

3.3.12 amend or waive any provision of this Section 3.3.

3.4 Series C Protective Provisions. At any time when shares of Series C Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least two-thirds (2/3rds) of the then outstanding shares of Series C Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.4.1 authorize or create (by reclassification, merger or otherwise) or issue or obligate itself to issue any new class or series of equity security (including any security convertible into or exercisable for any equity security) having rights, preferences or privileges with respect to dividends, redemption or payments upon liquidation senior to or on a parity with the Series C Preferred Stock;

3.4.2 increase or decrease the authorized number of directors constituting the Corporation's Board of Directors;

3.4.3 enter into a SPAC Transaction that is not a Qualified SPAC Transaction (as defined below); or

3.4.4 amend or waive any provision of this Section 3.4.

3.5 Series Protective Provisions. The Corporation shall not, without the prior written consent of (a) with respect to the Junior Preferred Stock, the holders of a majority of the outstanding shares of the applicable series of Preferred Stock voting separately as a single class, and (b) with respect to the Series C Preferred Stock, the holders of at least two-thirds (2/3rds) of the outstanding shares of Series C Preferred Stock voting separately as a single class, whether by amendment or waiver of the Corporation's certificate of incorporation or bylaws, or by reclassification, merger, consolidation, reorganization or otherwise, (x) alter or change the rights, preferences or privileges of such series of Preferred Stock in any manner that would adversely affect the rights, preferences or privileges of such affected series of Preferred Stock, or (y) increase or decrease the authorized number of shares of such series of Preferred Stock.

4. Optional Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by

dividing the applicable Original Issue Price for such series of Preferred Stock by the applicable Conversion Price (as defined below) in effect at the time of conversion. The "**Conversion Price**" shall initially mean (i) with respect to the Series C Preferred Stock, the Series C Original Issue Price, (ii) with respect to the Series B Preferred Stock, the Series B Original Issue Price, (iii) with respect to the Series A Preferred Stock, the Series A Original Issue Price, and (iv) with respect to the Series A-1 Preferred Stock, the Series A-1 Original Issue Price. Such initial Conversion Prices, and the rate at which shares of the applicable series of Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to such holder's nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion, and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary

amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the applicable Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of such Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such applicable adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the applicable Conversion Price shall be made for any declared but unpaid dividends on the respective series of Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) "**Option**" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) "**Original Issue Date**" shall mean the date on which the first share of Series C Preferred Stock was issued.

(c) "**Convertible Securities**" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) "**Additional Shares of Common Stock**" shall mean all shares of Common Stock issued (or, pursuant to Section 4.4.3 below, deemed to be issued) by the Corporation after the Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "**Exempted Securities**"):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on, or upon conversion of, Preferred Stock;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Section 4.5, 4.6, 4.7 or 4.8;

(iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation, including a majority of the Preferred Directors;

(iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Corporation, including a majority of the Preferred Directors;

(vi) shares of Common Stock issued or issuable in a registered public offering under the Securities Act (as defined below) pursuant to which all outstanding shares of Preferred Stock are automatically converted into Common Stock pursuant to Section 5;

(vii) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Corporation, including a majority of the Preferred Directors;

(viii) up to 724,485 shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation, including a majority of the Preferred Directors; or

(ix) shares of Common Stock issued or issuable in connection with any settlement of any action, suit, proceeding or litigation approved by the Board of Directors, including a majority of the Preferred Directors.

4.4.2 No Adjustment of Conversion Prices. No adjustment in the applicable Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common

Stock if the Corporation receives written notice from (a) with respect to the Junior Preferred Stock, the holders of a majority of the then outstanding shares of the applicable series of Junior Preferred Stock and (b) with respect to the Series C Preferred Stock, the holders of at least two-thirds (2/3rds) of the then outstanding shares of Series C Preferred Stock, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to any Conversion Price pursuant to the terms of Section 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the applicable Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such applicable Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the applicable Conversion Price to an amount which exceeds the lower of (i) the applicable Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the applicable Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the applicable Conversion Price pursuant to the terms of Section 4.4.4 (either because the consideration per share (determined pursuant to Section 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the applicable Conversion Price then in effect, or because such Option or Convertible Security was issued before the Original Issue Date), are revised after the Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the applicable Conversion Price of any series pursuant to the terms of Section 4.4.4, the applicable Conversion Price shall be readjusted to such applicable Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to a Conversion Price provided for in this Section 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Section 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the applicable Conversion Price that would result under the terms of this Section 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the applicable Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4.4.3), without consideration or for a consideration per share less than the applicable Conversion Price in effect immediately prior to such issue, then the applicable Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent ($0.0001)) determined in accordance with the following formula:

$$\mathbf{CP_2 = CP_1*(A + B) \div (A + C).}$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "**CP_2**" shall mean the applicable Conversion Price in effect immediately after such issue of Additional Shares of Common Stock

(b) "**CP_1**" shall mean the applicable Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) "**A**" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "**B**" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "**C**" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Section 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation, including a majority of the Preferred Directors; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation, including a majority of the Preferred Directors.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the applicable Conversion Price pursuant to the terms of Section 4.4.4, and such issuance dates occur within a period of no more than ninety (90) days from the first such issuance to the final such issuance, then, upon the final such issuance, the applicable Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Original Issue Date effect a subdivision of the outstanding Common Stock, the applicable Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall

at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock, the applicable Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this Section 4.5 shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the applicable Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the applicable Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the applicable Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the applicable Conversion Price shall be adjusted pursuant to this Section 4.6 as of the time of actual payment of such dividends or distributions; and (b) no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Sections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one (1) share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the applicable Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the

Preferred Stock. For the avoidance of doubt, nothing in this Section 4.8 shall be construed as preventing the holders of Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the General Corporation Law in connection with a merger triggering an adjustment hereunder, nor shall this Section 4.8 be deemed conclusive evidence of the fair value of the shares of Preferred Stock in any such appraisal proceeding.

4.9 Certificate as to Adjustments. Following the occurrence of any such adjustment or readjustment of a Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than fourteen (14) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock to which such adjustment relates a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which such Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than fourteen (14) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the applicable Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of such Preferred Stock. Any such notice of adjustment may be sent by email communication to the holders of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security;

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least fourteen (14) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon (a) the closing of the sale of shares of Common Stock to the public at a price of at least $21.572 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "**Securities Act**"), resulting in at least $50,000,000 of gross proceeds to the Corporation, (b) the closing of a SPAC Transaction where (i) the aggregate value of the Public Shares received (as set forth in the transaction agreement for the SPAC Transaction) with respect to each share of Series C Preferred Stock (or the Common Stock issuable upon conversion of one share of Series C Preferred Stock) at such closing is equal to at least $21.572 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the shares of Common Stock and/or Series C Preferred Stock), (ii) the public company surviving or resulting from the SPAC Transaction has available cash immediately after the consummation of the SPAC

Transaction of at least $50,000,000 from (A) cash retained by the SPAC following all redemption offers to its existing equity interest holders in connection with the SPAC Transaction, and (B) the net cash proceeds from any capital-raising transaction conducted in connection with the SPAC Transaction, and (iii) the Public Shares are listed for trading on the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange or another exchange or marketplace approved the Board of Directors, including the approval of a majority of the Preferred Directors (a "**Qualified SPAC Transaction**"), or (c) the date and time, or the occurrence of an event, specified by vote or written consent of (i) the holders of at least a majority of the then outstanding shares of the Preferred Stock, voting or consenting together as a single class on an as converted to Common Stock basis, (ii) the holders of a majority of the then outstanding shares of Series B Preferred Stock, voting or consenting together as a single class (provided, however, that the vote or consent pursuant to this clause (ii) shall not be required if (A) the consent required under the foregoing clause (i) is obtained (x) in connection with the consummation of a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act resulting in at least $50,000,000 of gross proceeds to the Corporation for the sale of shares of the Corporation's Common Stock to the public at a price of at least $14.1569 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock) **or** (y) in connection with the closing of a SPAC Transaction where the aggregate value of the Public Shares received (as set forth in the transaction agreement for the SPAC Transaction) with respect to each share of Series B Preferred Stock (or the Common Stock issuable upon conversion of one share of Series B Preferred Stock) at such closing is equal to at least $14.1569 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the shares of Common Stock and/or Preferred Stock) **or** (B) the Series B Preferred Stock is excluded from such conversion), and (iii) the holders of at least two-thirds (2/3rds) of the then outstanding shares of Series C Preferred Stock, voting or consenting together as a single class (provided, however, that the vote or consent pursuant to this clause (iii) shall not be required if the Series C Preferred Stock is excluded from such conversion) (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "**Mandatory Conversion Time**"), (A) all affected outstanding shares of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate as calculated pursuant to Section 4.1.1 and (B) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted shares of Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of the applicable series of Preferred Stock accordingly.

6. Redemption. The Preferred Stock is not redeemable at the option of the holder thereof.

7. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following such redemption or acquisition.

8. Waiver. Any of the rights, powers, preferences and other terms of the Series A Preferred Stock and/or Series A-1 Preferred Stock set forth herein may be waived on behalf of all holders of Series A Preferred Stock and Series A-1 Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Series A Preferred Stock and Series A-1 Preferred Stock then outstanding, voting together as a single class on an as-converted to Common Stock basis. Any of the rights, powers, preferences and other terms of the Series B Preferred Stock set forth herein may be waived on behalf of all holders of Series B Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Series B Preferred Stock then outstanding. Any of the rights, powers, preferences and other terms of the Series C Preferred Stock set forth herein may be waived on behalf of all holders of Series C Preferred Stock by the affirmative written consent or vote of the holders of at least two-thirds (2/3rds) of the shares of Series C Preferred Stock then outstanding.

9. Notices. Any notice required or permitted by the provisions of this Article FOURTH to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article NINTH to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article NINTH by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which the General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article TENTH shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee, affiliate or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, "**Covered Persons**"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation while such Covered Person is performing services in such capacity. Any repeal or modification of this Article ELEVENTH will only be prospective and will not affect the rights under this Article ELEVENTH in effect at the time of the occurrence of any actions or omissions to act giving rise to liability. Notwithstanding anything to the contrary contained elsewhere in the Certificate of Incorporation, the affirmative vote of the holders of at least a majority of the shares of Preferred Stock then outstanding will be required to amend or repeal, or to adopt any provisions inconsistent with, this Article ELEVENTH.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Twelfth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

IN WITNESS WHEREOF, this Fourth Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on March 1, 2021.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

BYLAWS

OF

CARIBOU BIOSCIENCES, INC.

A Delaware Corporation

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BYLAWS

OF

CARIBOU BIOSCIENCES, INC.,
a Delaware corporation

1. Offices.

1.1 Registered Office. The registered office shall be at the office of Incorporating Services Ltd. in the City of Dover, County of Kent, State of Delaware.

1.2 Other Offices. The corporation may also have offices at such other places both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

2. Meetings Of Stockholders.

2.1 Annual Meeting. Unless directors are elected by written consent in lieu of an annual meeting as permitted by Section 2.14, an annual meeting of the stockholders for the election of directors shall be held at such place, if any, either within or without the State of Delaware as shall be designated on an annual basis by the Board of Directors and stated in the notice of the meeting. Any other proper business may be transacted at the annual meeting.

2.2 Meetings by Remote Communication. The Board of Directors may, in its sole discretion, determine that any meeting shall not be held at any place, but may instead be held solely by means of remote communication in accordance with Section 2.13.

2.3 Notice of Meetings. Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.

2.4 Timing of Notice. Unless otherwise provided in the Delaware General Corporation Law (the "DGCL"), the written notice of any meeting of the stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting.

2.5 Voting List. The officer who has charge of the stock ledger of the corporation shall prepare and make, or cause a third party to prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Nothing contained in this Section 2.5 shall require the corporation to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least 10 days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the corporation.. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.6 Special Meetings. Special meetings of the stockholders of this corporation, for any purpose or purposes, unless otherwise prescribed by statute or by the Certificate of Incorporation, shall be called by the President or Secretary at the request in writing of a majority of the members of the Board of Directors or at the request in writing of stockholders owning at least 10% of the total voting power of all outstanding shares of stock of this corporation then entitled to vote, and may not be called absent such a request. Such request shall state the purpose or purposes of the proposed meeting.

2.7 Scope of Business at Special Meeting. Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

2.8 Quorum. Except as otherwise provided by statute or by the Certificate of Incorporation, the holders of a majority of the shares entitled to vote, present in person or represented by proxy, shall constitute a quorum at all meetings of stockholders. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the chairman of the meeting or the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally notified. If the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting as provided in Section 2.3.

2.9 Qualifications to Vote. The stockholders of record on the books of the corporation at the close of business on the record date as determined by the Board of Directors and only such stockholders shall be entitled to vote at any meeting of stockholders or any adjournment thereof.

2.10 Record Date for Meetings of the Stockholders. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

2.11 Action at Meetings. When a quorum is present at any meeting, the vote of the holders of a majority of the shares of stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which by express provision of applicable law or of the Certificate of Incorporation, a different vote is required, in which case such express provision shall govern and control the decision of such question.

2.12 Voting and Proxies. Unless otherwise provided in the Certificate of Incorporation, and subject to Section 213 of the DGCL, each stockholder shall be entitled to one vote in person or by proxy for each share of capital stock having voting power held by such stockholder. If the Certificate of Incorporation provides for more or less than one vote for any share, on any matter, every reference in these Bylaws to a majority or other proportion of stock, voting stock or shares shall refer to such majority or other proportion of the votes of such stock, voting stock or shares. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by proxy, but no proxy shall be voted on after 3 years from its date, unless the proxy provides for a longer period. A duly executed proxy shall be irrevocable if it states it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power.

2.13 Attendance by Stockholders not Physically Present. If authorized by the Board of Directors in its sole discretion, and subject to such guidelines and procedures as the Board of Directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication: (a) participate in a meeting of stockholders; and (b) be deemed present in person and vote at a meeting of stockholders, whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the corporation shall

implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation.

2.14 Action by Stockholders Without a Meeting. Unless otherwise provided in the Certificate of Incorporation, any action required to be taken at any annual or special meeting of stockholders of the corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and shall be delivered to the corporation by delivery to its registered office in the State of Delaware (by hand or by certified or registered mail, return receipt requested), to its principal place of business, or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded; provided, however, that action by written consent to elect directors, if less than unanimous, shall be in lieu of holding an annual meeting only if all the directorships to which directors could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action. Prompt notice of the taking of the corporate action without a meting by less than unanimous written consent shall be given to those stockholders who have not consent in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of stockholders or members to take the action were delivered to the corporation by delivery to its registered office in the State of Delaware (by hand or by certified or registered mail, return receipt requested), to its principal place of business, or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded.

2.15 Consent by Electronic Transmission. If a stockholder provides consent in writing to action without a meeting by electronic transmission, such consent shall be deemed to have been delivered when such consent is delivered to its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded.

2.16 Record Date for Action by Stockholders Without a Meeting. In order that the corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than 10 days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by the DGCL, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation by delivery to its registered office in Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by the DGCL, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

2.17 Nominations for Board of Directors. Nominations for election to the Board of Directors may be made by the Board of Directors or by any stockholder of any outstanding class of capital stock of the corporation entitled to vote for the election of directors. Nominations, other than those made by the Board of Directors of the corporation, must be preceded by notification in writing in fact received by the Secretary of the corporation not less than 60 days prior to any meeting of stockholders called for the election of directors. Such notification shall contain the written consent of each proposed nominee to serve as a director if so elected and the following information as to each proposed nominee and as to each person, acting alone or in conjunction with one or more other persons as a partnership, limited partnership, syndicate or other group, who participates or is expected to participate in making such nomination or in organizing, directing or financing such nomination or solicitation of proxies to vote for the nominee:

(i) the name, age, residence, address, and business address of each proposed nominee and of each such person;

(ii) the principal occupation or employment, the name, type of business and address of the corporation or other organization in which such employment is carried on of each proposed nominee and of each such person;

(iii) the amount of stock of the corporation owned beneficially, either directly or indirectly, by each proposed nominee and each such person; and

(iv) a description of any arrangement or understanding of each proposed nominee and of each such person with each other or any other person regarding future employment or any future transaction to which the corporation will or may be a party.

The presiding officer of the meeting shall have the authority to determine and declare to the meeting that a nomination not preceded by notification made in accordance with the foregoing procedure shall be disregarded.

3. Directors.

3.1 Powers. The business and affairs of the corporation shall be managed by or under the direction of a Board of Directors, except as may otherwise be provided by law or in the Certificate of Incorporation. All powers of the corporation, except those specifically reserved or granted to the stockholders by law, the Certificate of Incorporation or these Bylaws, are hereby granted to and vested in the Board of Directors.

3.2 Number; Election; Tenure and Qualification. The Board of Directors of the corporation shall consist of one or more members, each of whom shall be a natural person. The number of directors which shall constitute the whole board shall be fixed from time to time by resolution of the Board of Directors or by the stockholders at the annual meeting of the stockholders, with the exception of the first Board of Directors, which shall be elected by the incorporator. Except as provided in the Certificate of Incorporation or these Bylaws, the directors shall be elected at the annual meeting of the stockholders by a plurality vote of the shares represented in person or by proxy. Each director elected shall hold office until such director's successor is elected and qualified or until such director's earlier resignation or removal. Directors need not be stockholders.

3.3 Vacancies and Newly Created Directorships. Unless otherwise provided in the Certificate of Incorporation or these Bylaws, vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a majority of the whole Board, or by a sole remaining director. If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the DGCL. If, at the time of filling any vacancy or any newly created directorship, the directors then in office shall constitute less than a majority of the whole board (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the voting stock at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office, which election shall be governed by Section 211 of the DGCL as far as applicable.

3.4 Meeting of Newly Elected Board of Directors. The first meeting of each newly elected Board of Directors shall be held immediately following the annual meeting of stockholders and no notice of such meeting shall be necessary to the newly elected directors in order legally to constitute the meeting, provided a quorum shall be present. In the event such meeting is not held at such time, the meeting may be held at such time and place as shall be specified in a notice given as hereinafter provided for special meetings of the Board of Directors, or as shall be specified in a written waiver signed by all of the directors.

3.5 Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the Board of Directors; provided that any director who is absent when such a determination is made shall be given notice of such location.

3.6 Special Meetings. Special meetings of the Board of Directors may be called by the President on 2 days' notice to each director by mail, overnight courier service, or electronic transmission; special meetings shall be called by the President or Secretary in a like manner and on like notice on the written request of two directors unless the Board of Directors consists of only one director, in which case special meetings shall be called by the President or Secretary in a like manner and on like notice on the written request of the sole director. Notice may be waived in accordance with Section 229 of the DGCL.

3.7 Quorum and Action at Meetings. At all meetings of the Board of Directors, a majority of the total number of directors then in office shall constitute a quorum for the transaction of business unless the Certificate of Incorporation requires a greater number. The vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors unless the Certificate of Incorporation shall require a vote of a greater number. If a quorum shall not be present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

3.8 Action Without a Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

3.9 Telephonic Meeting. Unless otherwise restricted by the Certificate of Incorporation, members of the Board of Directors, or any committee designated by the Board of Directors, or any subcommittee designated by any such committee, may participate in a meeting of the Board of Directors, or any committee or subcommittee, as the case may be, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.10 Committees. The Board of Directors may designate one or more committees, each committee to consist of 1 or more of the directors of the corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

3.11 Committee Authority. Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving, adopting or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any Bylaw of the corporation. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board of Directors.

3.12 Subcommittees. Unless otherwise provided in the Certificate of Incorporation or the resolution of the Board of Directors designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the committee.

3.13 Committee Minutes. Each committee and subcommittee shall keep regular minutes of its meetings and report the same to the Board of Directors when required to do so by the Board of Directors.

3.14 Directors Compensation. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, the Board of Directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary as director. No such payment shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor. Members of special or standing committees or subcommittees may be allowed like compensation for attending committee or subcommittee meetings.

3.15 Resignation. Any director or officer of the corporation may resign at any time upon notice given in writing or by electronic transmission to the corporation. A resignation is effective when the resignation is delivered unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events. A resignation which is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable. The acceptance of a resignation shall not be necessary to make it effective unless expressly so provided in the resignation.

3.16 Removal. Unless otherwise restricted by the Certificate of Incorporation, these Bylaws or applicable law, any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of shares entitled to vote at an election of directors.

4. Notices.

4.1 Notice to Directors and Stockholders. Whenever, under the provisions of the statutes or of the Certificate of Incorporation or of these Bylaws, notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing, by mail, addressed to such director or stockholder, at his address as it appears on the records of the corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. Notice to directors may also be given by telephone or electronic transmission (with confirmation of receipt if such electronic transmission is by telegram).

4.2 Notice to Stockholders by Electronic Transmission. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation under any provision of the DGCL, the Certificate of Incorporation, or these Bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given, unless effective notice to stockholders by electronic transmission is prohibited by law.' Any such consent shall be revocable by the stockholder by written notice to the corporation: Any such consent shall be deemed revoked if (i) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent and (ii) such inability becomes known to the Secretary or an Assistant Secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

4.3 Effectiveness of Notice by Electronic Transmission. Notice given pursuant to Section 4.2 shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and (iv) if by any other form of electronic transmission, when directed to the stockholder. An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

4.4 Waiver. Whenever any notice is required to be given under any provision of the DGCL or of the Certificate of Incorporation or of these Bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee or subcommittee of directors need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the Certificate of Incorporation or these Bylaws. Attendance at the meeting is not a waiver of any right to object to the consideration of matters required by the DGCL to be included in the notice of the meeting but not so included, if such objection is expressly made at the meeting.

4.5 Definition of Electronic Transmission. For purposes of these Bylaws, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process. For the avoidance of doubt, "electronic transmission" includes transmission by facsimile.

5. Officers.

5.1 Enumeration. The officers of the corporation shall be chosen by the Board of Directors and shall include a President, a Secretary, a Treasurer (who may also be referred to as the Chief Financial Officer) and such other officers with such other titles as the Board of Directors shall determine. The Board of Directors may elect from among its members a Chairman or Chairmen of the Board and a Vice Chairman of the Board. The Board of Directors may also choose one or more Vice-Presidents, Assistant Secretaries and Assistant Treasurers. Any number of offices may be held by the same person, unless the Certificate of Incorporation or these Bylaws otherwise provide.

5.2 Election. The Board of Directors at its first meeting after each annual meeting of stockholders shall elect a President, a Secretary, a Treasurer and such other officers with such other titles as the Board of Directors shall determine.

5.3 Appointment of Other Agents. The Board of Directors may appoint such other officers and agents as it shall deem necessary, who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors.

5.4 Compensation. The salaries of all officers of the corporation shall be fixed by the Board of Directors or a committee thereof. The salaries of agents of the corporation shall, unless fixed by the Board of Directors, be fixed by the President or any Vice-President of the corporation.

5.5 Tenure. Each officer shall hold office until such officer's successor is elected and qualified or until such officer's earlier resignation or removal. Any officer elected or appointed by the Board of Directors may be removed at any time by the affirmative vote of a majority of the directors of the Board of Directors. Any vacancy occurring in any office of the corporation shall be filled by the Board of Directors.

5.6 Chairman of the Board and Vice-Chairman of the Board. The Chairman of the Board, if any, shall preside at all meetings of the Board of Directors and of the stockholders at which the Chairman shall be present. The Chairman shall have and may exercise such powers as are, from time to time, assigned to the Chairman by the Board of Directors and as may be provided by law. In the absence of the Chairman of the Board, the Vice Chairman of the Board, if any, shall preside at all meetings of the Board of Directors and of the stockholders at which the Vice Chairman shall be present. The Vice Chairman shall have and may exercise such powers as are, from time to time, assigned to such person by the Board of Directors and as may be provided by law.

5.7 President. The President shall be the Chief Executive Officer of the corporation unless such title is assigned to another officer of the corporation; in the absence of a Chairman and Vice Chairman of the Board, the President shall preside as the chairman of meetings of the stockholders and the Board of Directors; and the President shall have general and active management of the business of the corporation and shall see that all orders and resolutions of the Board of Directors are carried into effect. The President or any Vice President shall execute bonds, mortgages and other contracts requiring a seal, under the seal of the corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the corporation.

5.8 Vice-President. In the absence of the President or in the event of the President's inability or refusal to act, the Vice-President, if any (or in the event there be more than one Vice-President, the Vice-Presidents in the order designated by the Board of Directors, or in the absence of any designation, then in the order of their election) shall perform the duties of the President, and when so acting shall have all the powers of and be subject to all the restrictions upon the President. The Vice-President shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

5.9 Secretary. The Secretary shall attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings of the meetings of the corporation and of the Board of Directors in a book to be kept for that purpose and shall perform like duties for the standing committees when required. The Secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or President, under whose supervision the Secretary shall be subject. The Secretary shall have custody of the corporate seal of the corporation and the Secretary, or an Assistant Secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by the Secretary's signature or by the signature of such Assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the corporation and to attest the affixing by such officer's signature.

5.10 Assistant Secretary. The Assistant Secretary, or if there be more than one, the Assistant Secretaries in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election) shall, in the absence of the Secretary or in the event of the Secretary's inability or refusal to act, perform the duties and exercise the powers of the Secretary and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

5.11 Chief Financial Officer. The Chief Financial Officer may also be designated by the alternate title of "Treasurer." The Chief Financial Officer shall have the custody of all moneys and securities of the Corporation and shall keep regular books of account. Such officer shall disburse funds of the Corporation in payment of the just demands against the Corporation, or as may be ordered by the Board, taking proper vouchers for such disbursements, and shall render to the Board from time to time as may be required of such officer, an account of all transactions as Chief Financial Officer and of the financial condition of the Corporation. Such officer shall perform all duties incident to such office or that are properly required by the President or by the Board. If required by the Board of Directors, the Chief Financial Officer shall give the corporation a bond (which shall be renewed every 6 years) in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of such officer's office and for the restoration to the corporation, in case of such officer's death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in such officer's possession or control belonging to the corporation.

5.12 Assistant Treasurer. The Assistant Treasurer or the Assistant Treasurers, in the order of their seniority, shall, in the absence or disability of the Chief Financial Officer, or in the event of such officer's refusal to act, perform the duties and exercise the powers of the Chief Financial Officer, and shall have such powers and discharge such duties as may be assigned from time to time by the President or by the Board of Directors.

6. Capital Stock.

6.1 Certificates. The shares of the corporation shall be represented by a certificate, unless and until the Board of Directors adopts a resolution permitting shares to be uncertificated. Certificates shall be signed by, or in the name of the corporation by, (i) the Chairman of the Board, the Vice-Chairman of the Board, the President or a Vice-President, and (ii) the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, certifying the number of shares owned by such stockholder in the corporation. Certificates may be issued for partly paid shares and in such case upon the face or back of the certificates issued to represent any such partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be specified.

6.2 Class or Series. If the corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the corporation shall issue to represent such class or series of stock, provided that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the corporation shall issue to represent such class or series of stock, a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to Sections 151, 156, 202(a) or 218(a) of the DGCL or a statement that the corporation will furnish without charge, to each stockholder who so requests, the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

6.3 Signature. Any of or all of the signatures on a certificate may be facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

6.4 Lost Certificates. The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or such owner's legal representative, to advertise the same in such manner as it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

6.5 Transfer of Stock. Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books. Upon receipt of proper transfer instructions from the registered owner of uncertificated shares such uncertificated shares shall be canceled and issuance of new equivalent uncertificated shares or certificated shares shall be made to the person entitled thereto and the transaction shall be recorded upon the books of the corporation.

6.6 Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

7. General Provisions.

7.1 Dividends. Dividends upon the capital stock of the corporation, subject to the applicable provisions, if any, of the Certificate of Incorporation, may be declared by the Board of Directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property or in shares of capital stock, subject to the provisions of the Certificate of Incorporation. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purposes as the Board of Directors shall think conducive to the interest of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

7.2 Record Date for Dividends. In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

7.3 Checks. All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

7.4 Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

7.5 Seal. The Board of Directors may adopt a corporate seal having inscribed thereon the name of the corporation, the year of its organization and the words “Corporate Seal, Delaware”. The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

7.6 Loans. The Board of Directors of the corporation may, without stockholder approval, authorize loans to, or guaranty obligations of, or otherwise assist, including, without limitation, the adoption of employee benefit plans under which loans and guarantees may be made, any officer or other employee of the corporation or of its subsidiary, including any officer or employee who is a director of the corporation or its subsidiary, whenever, in the judgment of the Board of Directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest, and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation.

8. Indemnification.

8.1 Scope. The corporation shall, to the fullest extent permitted by Section 145 of the DGCL, as that section may be amended and supplemented from time to time, indemnify any director of the corporation, against expenses (including attorneys’ fees), judgments, fines, amounts paid in settlement and/or other matters referred to in or covered by that section, by reason of the fact that such person is or was a director of the corporation, or is or was serving at the request of the corporation as a director another corporation, partnership, joint venture, trust or other enterprise. The corporation may, to the fullest extent permitted by Section 145 of the DGCL, as that section may be amended and supplemented from time to time, indemnify any officer, employee or agent of the corporation, against expenses (including attorneys’ fees), judgments, fines, amounts paid in settlement and/or other matters referred to in or covered by that section, by reason of the fact that such person is or was an officer, employee or agent of the corporation, or is or was serving at the request of the corporation as an officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise.

8.2 Advancing Expenses. Expenses (including attorneys’ fees) incurred by a present or former director of the corporation in defending a civil, criminal, administrative or investigative action, suit or proceeding by reason of the fact that such person is or was a director of the corporation (or is or was serving at the request of the corporation as a director of another corporation, partnership, joint venture, trust or other enterprise) shall be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized by relevant provisions of the DGCL; provided, however, the corporation shall not be required to advance such expenses to a director (i) who commences any action, suit or proceeding as a plaintiff unless such advance is specifically approved by a majority of the Board of Directors, or (ii) who is a party to an action, suit or proceeding brought by the corporation and approved by a majority of the Board of Directors which alleges willful misappropriation of corporate assets by such director, disclosure of confidential information in violation of such director’s fiduciary or contractual obligations to the corporation, or any other willful and deliberate breach in bad faith of such director’s duty to the corporation or its stockholders.

8.3 Liability Offset. The corporation's obligation to provide indemnification under this Section 8 shall be offset to the extent the indemnified party is indemnified by any other source including, but not limited to, any applicable insurance coverage under a policy maintained by the corporation, the indemnified party or any other person.

8.4 Continuing Obligation. The provisions of this Section 8 shall be deemed to be a contract between the corporation and each director of the corporation who serves in such capacity at any time while this bylaw is in effect, and any repeal or modification thereof shall not affect any rights or obligations then existing with respect to any state of facts then or theretofore existing or any action, suit or proceeding theretofore or thereafter brought based in whole or in part upon any such state of facts.

8.5 Nonexclusive. The indemnification and advancement of expenses provided for in this Section 8 shall (i) not be deemed exclusive of any other rights to which those indemnified may be entitled under any bylaw, agreement or vote of stockholders or disinterested directors or otherwise, both as to action in their official capacities and as to action in another capacity while holding such office, (ii) continue as to a person who has ceased to be a director and (iii) inure to the benefit of the heirs, executors and administrators of such a person.

8.6 Other Persons. In addition to the indemnification rights of directors, officers, employees, or agents of the corporation, the Board of Directors in its discretion shall have the power on behalf of the corporation to indemnify any other person made a party to any action, suit or proceeding who the corporation may indemnify under Section 145 of the DGCL.

8.7 Definitions. The phrases and terms set forth in this Section 8 shall be given the same meaning as the identical terms and phrases are given in Section 145 of the DGCL, as that section may be amended and supplemented from time to time.

9. Amendments. Except as otherwise provided in the Certificate of Incorporation, these Bylaws may be altered, amended or repealed, or new Bylaws may be adopted, by the holders of a majority of the outstanding voting shares or by the Board of Directors, when such power is conferred upon the Board of Directors by the Certificate of Incorporation, at any regular meeting of the stockholders or of the Board of Directors or at any special meeting of the stockholders or of the Board of Directors if notice of such alteration, amendment, repeal or adoption of new Bylaws be contained in the notice of such special meeting. If the power to adopt, amend or repeal Bylaws is conferred upon the Board of Directors by the Certificate of Incorporation, it shall not divest or limit the power of the stockholders to adopt, amend or repeal Bylaws.

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CERTIFICATE OF THE SECRETARY OF

CARIBOU BIOSCIENCES, INC.

The undersigned certifies:

1. That the undersigned is the duly elected and acting Secretary of Caribou Biosciences, Inc., a Delaware corporation (the "Company"); and

2. That the foregoing Bylaws constitute the Bylaws of the Company as duly adopted by the Board of Directors of the Company as of the 13th day of June, 2012.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seat of the Company as of this 13th day of June, 2012.

/s/ Rachel Haurwitz
Rachel Haurwitz
Secretary

Exhibit 4.1

SECOND AMENDED AND RESTATED
INVESTORS' RIGHTS AGREEMENT

THIS SECOND AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of March 2, 2021, by and among Caribou Biosciences, Inc., a Delaware corporation (the "**Company**"), each of the investors listed on Schedule A hereto (each, an "**Investor**") and any Additional Purchaser (as defined in the Purchase Agreement) that becomes a party to this Agreement in accordance with Section 6.9 hereof.

WHEREAS, certain of the Investors (the "**Existing Investors**") hold shares of the Company's Series A Preferred Stock, Series A-1 Preferred Stock, Series B Preferred Stock, and/or shares of Common Stock (all as defined below) issued upon conversion thereof and possess registration rights, information rights, rights of first offer, and other rights pursuant to an Amended and Restated Investors' Rights Agreement dated as of May 12, 2016, among between the Company and such Investors (the "**Prior Agreement**"); and

WHEREAS, the Existing Investors are holders of at least a majority of the outstanding Registrable Securities of the Company (as defined in the Prior Agreement), and desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain of the Investors are parties with the Company to that certain Series C Preferred Stock Purchase Agreement of even date herewith (the "**Purchase Agreement**"), pursuant to which certain of the Company's and such Investors' obligations are conditioned upon the execution and delivery of this Agreement.

NOW, THEREFORE, the Company and the Existing Investors agree that the Prior Agreement shall be amended and restated in its entirety by this Agreement, and the parties to this Agreement further agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, limited partner, member, manager, managing member, employee, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or is under common investment management with or shares the same management company with, such Person. For purposes of this definition, the term "control" when used with respect to any Person shall mean the power to direct the management or policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise, and the terms "controlling" and "controlled" shall have meanings correlative to the foregoing.

1.2 "**Board**" means the board of directors of the Company.

1.3 "**Certificate of Incorporation**" means the Fourth Amended and Restated Certificate of Incorporation of the Company (as the same may be further amended or restated).

1.4 "**Common Stock**" means shares of the Company's common stock, $0.0001 par value per share.

1.5 "**Competitor**" means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in the same business as the Company, but shall not include (1) any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than twenty percent (20%) of the outstanding equity of any business competitive with the Company and does not, nor do any of its Affiliates, have a right to designate any members of the board of directors of any such company, (2) Pig Improvement Company UK Limited ("**PIC**"), (3) Novartis Institutes for BioMedical Research, Inc. ("**NIBR**"), (4) E.I. du Pont de Nemours & Co. ("**DuPont**"), (5) F-Prime Capital Partners Healthcare Fund IV LP or its Affiliate funds ("**F-Prime**"), (6) Anterra F&A Ventures I Coöperatief U.A. or its Affiliate funds ("**Anterra**"), (7) PFM Healthcare Master Fund, L.P., Partner Investments, L.P., PFM Healthcare Growth Equity Holdings I, LLC (collectively, "**PFM**") or their Affiliate funds, (8) Zone III Healthcare Holdings, LLC or its Affiliate funds, (9) RIDGEBACK CAPITAL INVESTMENTS LP or its Affiliate

funds and (10) AbbVie Inc. or AbbVie Manufacturing Management Unlimited Company as long as it remains an Affiliate of AbbVie, Inc.(collectively, "**AbbVie**"); provided, however, that in the event that the Board unanimously determines in good faith that PIC, NIBR, DuPont, F-Prime, Anterra, or AbbVie is or becomes competitive with the business of the Company, the Board shall be permitted to designate PIC, NIBR, DuPont, F-Prime, Anterra or AbbVie, as the case may be, as a "Competitor" for purposes of Section 3.2 of this Agreement.

1.6 "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.7 "**Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.8 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.9 "**Excluded Registration**" means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.10 "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.11 "**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.12 "**Holder**" means any holder of Registrable Securities who is a party to this Agreement.

1.13 "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, in each case including adoptive relationships, of a natural person referred to herein.

1.14 "**Initiating Holders**" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.15 "**IPO**" means the Company's first underwritten public offering of its Common Stock under the Securities Act.

1.16 "**Lead Investors**" means, collectively, PFM , Zone III Healthcare Holdings, LLC, and RIDGEBACK CAPITAL INVESTMENTS LP (but shall not include the Affiliate funds of such entities for purposes of the entities covered by this definition), as long as, in determining the status of such entity as a Lead Investor, such entity, together with its Affiliate funds, continues to beneficially own at least twenty percent (20%) of the shares of Series C Preferred Stock acquired by such Lead Investor pursuant to the Purchase Agreement.

1.17 "**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.18 "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.19 "**Preferred Stock**" means, collectively, shares of the Company's Series C Preferred Stock, Series B Preferred Stock, Series A-1 Preferred Stock, and Series A Preferred Stock.

1.20 "**Registrable Securities**" means (i) the Common Stock issuable or issued upon conversion of Preferred Stock; (ii) any Common Stock**,** or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company**,** acquired by the Investors after the date hereof; and (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.13 of this Agreement.

1.21 "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.22 "**Restricted Securities**" means the securities of the Company required to bear the legend set forth in Section 2.12(b) hereof.

1.23 "**SEC**" means the Securities and Exchange Commission.

1.24 "**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

1.25 "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

1.26 "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.27 "**Selling Expenses**" means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.

1.28 "**Series A Preferred Stock**" means shares of the Company's Series A Preferred Stock, $0.0001 par value per share.

1.29 "**Series A-1 Preferred Stock**" means shares of the Company's Series A-1 Preferred Stock, $0.0001 par value per share.

1.30 "**Series B Preferred Stock**" means shares of the Company's Series B Preferred Stock, $0.0001 par value per share.

1.31 "**Series C Preferred Stock**" means shares of the Company's Series C Preferred Stock, $0.0001 par value per share.

1.32 "**SPAC Transaction**" means any transaction or series of related transactions in which the Company's outstanding shares of capital stock are exchanged for or otherwise converted into securities that are publicly listed on a securities exchange (the "**Public Shares**"), including through a merger, acquisition, business combination, or similar transaction, in each case with a vehicle commonly known as a special purpose acquisition company (a "**SPAC**").

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five (5) years after the date of this Agreement or (ii) the date which is one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of at least a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to Registrable Securities then outstanding having an anticipated aggregate offering price, net of Selling Expenses, of at least $20 million, then the Company shall (x) within ten (10) days after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders, and (y) as soon as practicable, and in any event within one hundred twenty (120) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Sections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from a Holder or Holders of Registrable Securities, that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holder(s) having an anticipated aggregate offering price, net of Selling Expenses, of at least $1,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Sections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Board it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company, (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential, or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than one hundred twenty (120) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any twelve (12) month period.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(a)(i) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Section 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(b) (i)

during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Section 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of

Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering or (ii) the number of Registrable Securities included in the offering be reduced below thirty percent (30%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to one hundred eighty (180) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed $50,000 per registration, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Sections 2.1(a) or 2.1(b), as the case may be; provided, further, that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Sections 2.1(a) or 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other

aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Sections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things,

whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided, further, that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would provide to such holder the right to include securities in any registration on other than either a pro rata basis with respect to the Registrable Securities or on a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include; or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Section 6.9.

2.11 "Market Stand-off" Agreement.

(a) Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company of shares of its Common Stock or any other equity securities under the Securities Act on a registration statement on Form S-1, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days, which period may be extended upon the request of the managing underwriter for an additional period of up to fifteen (15) days to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock, or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock, held immediately before the effective date of the registration statement for the IPO (excluding any shares purchased in connection with or conditioned on the IPO and any securities acquired following the effective date of the registration statement for the IPO), or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section 2.11 shall only apply to the IPO and shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided, further, that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions and the Company uses commercially reasonable efforts to obtain a similar agreement from all stockholders individually owning more than one percent (1%) of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock). The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements.

(b) In connection with a SPAC Transaction, each Holder agrees to enter into an agreement with the SPAC or the Company to not transfer the Public Shares received by such Holder in connection with the SPAC Transaction (excluding (i) any Public Shares received in exchange for or upon conversion of securities issued in a private placement that is connected to or conditioned on the SPAC Transaction and (ii) any securities acquired following the consummation of the SPAC Transaction) pursuant to terms substantially similar to the terms in Section 2.11(a) (modified as appropriate for a SPAC Transaction).

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of shares pursuant to an effective registration statement or, following the IPO, SEC Rule 144, in each case, to be bound by the terms of this Agreement.

(b) Each certificate, instrument or book-entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Section 2.12(c)) be notated, stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Section 2.12.

(c) The holder of such Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a notice, legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that, with respect to transfers under the foregoing clause (y), each transferee agrees in writing to be subject to the terms of this Section 2.12. Each certificate, instrument or book entry representing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Section 2.12(b), except that such certificate, instrument or book entry shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Sections 2.1 or 2.2 shall terminate upon the earliest to occur of:

(a) the closing of a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation;

(b) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration (and without the requirement for the Company to be in compliance with the current public information required under subsection (c)(1) of SEC Rule 144); and

(c) the third (3rd) anniversary of the earliest to occur of (A) the IPO or (B) a SPAC Transaction.

3. Information and Observer Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Investor, provided that the Board has not reasonably determined that such Investor is a Competitor:

(a) as soon as practicable after the end of each fiscal year of the Company, and in any event within one hundred fifty (150) days after the end of each fiscal year of the Company (provided that for the 2020 fiscal year end, such period shall be one hundred eighty (180) days after the 2020 fiscal year end), a consolidated balance sheet of the Company and its subsidiaries, if any, as at the end of such fiscal year, and consolidated statements of income and cash flows of the Company and its subsidiaries, if any, for such year; all such financial statements audited and certified by independent public accountants selected by the Company;

(b) as soon as practicable after the end of the first, second and third quarterly accounting periods in each fiscal year of the Company, and in any event within forty-five (45) days after the end of the first, second, and third quarterly accounting periods in each fiscal year of the Company, an unaudited consolidated balance sheet of the Company and its subsidiaries, if any, as of the end of each such quarterly period, and unaudited consolidated statements of income and cash flows of the Company and its subsidiaries, if any, for such period, prepared in accordance with U.S. generally accepted accounting principles consistently applied, subject to changes resulting from normal year-end audit adjustments;

(c) as soon as practicable, but in any event within forty-five (45) days after the end of each quarter of each fiscal year of the Company, a summary statement showing the aggregate number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Investors to calculate their respective percentage equity ownership in the Company; and

(d) as soon as practicable, but in any event thirty (30) days before the end of each fiscal year, a budget for the next fiscal year, prepared on a monthly basis, including revenue, expenses and cash position for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Section 3.1 to the contrary, the Company may cease providing the information set forth in this Section 3.1 during the period starting with the date sixty (60) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Section 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Investor (provided that the Board has not reasonably determined that such Investor is a Competitor), at such Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, in all cases during normal business hours of the Company as may be reasonably requested by the Investor; provided, however, that the Company shall not provide, pursuant to this Section 3.2, access to any information that it in good faith considers to be (x) a trade secret or (y) scientific or technical confidential information that is competitively sensitive; provided, further, that (i) the Company shall not be obligated to provide, pursuant to this Section 3.2, access to any information that it reasonably and in good faith determines the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel and (ii) any confidential information disclosed pursuant to this Section 3.2 shall be subject to the confidentiality and other restrictions under Section 3.5.

3.3 Observer Rights. As long as any shares of the Series A Preferred Stock, the Series A-1 Preferred Stock, or the Series B Preferred are outstanding, the holders of a majority of the Series A Preferred, the Series A-1 Preferred, and the Series B Preferred shall have the right, by a vote of a majority of the holders of such series of Preferred Stock, voting together as a single class on an as converted to Common Stock basis, to designate one (1) representative thereof who shall be invited by the Company to attend all meetings of the Board in a nonvoting observer capacity and, in this respect, shall be given copies of all notices, minutes, consents, and other materials that the Company provides to the Board, such materials to be made available to such representative at or about the time as such materials are provided to the Board; provided, however, that such representative shall agree to hold in confidence all information so provided (it being understood that such representative shall be entitled to provide such information to the holders of the outstanding shares of the Series A Preferred Stock, the Series A-1 Preferred Stock, and the Series B Preferred, subject to the confidentiality and the other restrictions set forth in this Agreement); provided, further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if the Board has determined that such representative is a Competitor and/or if the representative's access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in a conflict of interest or disclosure of trade secrets; and provided, further, that the Company may instruct such representative to withhold (and such representative shall withhold) such information from any holder of shares of the Series A Preferred Stock, the Series A-1 Preferred Stock, and/or the Series B Preferred if the Board has determined that such holder is a Competitor.

3.4 Termination of Rights. The covenants set forth in Section 3.1, Section 3.2 and Section 3.3 shall terminate and be of no further force or effect (i) immediately before the consummation of the earliest to occur of (A) the IPO or (B) a SPAC Transaction, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act due to shares of the Company, or a parent of the Company, being listed on a national securities exchange or trading system, or (iii) upon the closing of a Deemed Liquidation Event, whichever event occurs first.

3.5 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 3.5 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Section 3.5; (iii) to any Affiliate or any existing or prospective partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided, that, to the extent such Persons do not have professional confidentiality obligations under law or the applicable profession's code of conduct, unless such Person is otherwise subject to an obligation of confidentiality with respect to such information, the Investor obtains from such Person an agreement to comply with the confidentiality provisions that apply to the Investor pursuant to this Agreement; (iv) as requested by a regulator or self-regulatory organization; (v) to the extent necessary in connection with Investor's tax filings, financial, and other reporting (including with the SEC) and accounting matters; or (vi) as may otherwise be required by law, provided that, such Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure. Notwithstanding anything in this Agreement to the contrary and unless an Investor is an Excepted Investor (as defined in the Purchase Agreement), the Company shall not provide any Investor that is a foreign person (as defined under Section 721 of the Defense Production Act of 1950, as amended, including all implementing regulations thereof (the "**DPA**")) with "material non-public technical information" within the meaning of Section 721 of the DPA.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Section 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities

to each Investor. An Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having "beneficial ownership," as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Investor ("**Investor Beneficial Owners**"); provided that each such Affiliate or Investor Beneficial Owner (x) is not a Competitor, unless such party's purchase of New Securities is otherwise consented to by the Board, (y) agrees to enter into this Agreement and each of the Voting Agreement and the Right of First Refusal and Co-Sale Agreement (as those terms are defined in the Purchase Agreement) as an "**Investor**" under each such agreement (provided that any Competitor shall not be entitled to any rights as an Investor under Sections 3.1, 3.2, 3.3 and/or 4.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the Investor holding the fewest number of Preferred Stock and any other Derivative Securities.

(a) The Company shall give notice (the "**Offer Notice**") to each Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within ten (10) days after the Offer Notice is given, each Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Investor) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such ten (10) day period, the Company shall promptly notify each Investor that elects to purchase or acquire all the shares available to it (each, a "**Fully Exercising Investor**") of any other Investor's failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Investors were entitled to subscribe but that were not subscribed for by the Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Section 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Section 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Section 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within ninety (90) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Investors in accordance with this Section 4.1.

(d) The right of first offer in this Section 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Certificate of Incorporation); (ii) shares of Common Stock issued in the IPO; and (iii) the issuance of shares of Series C Preferred Stock to Additional Purchasers pursuant to the Purchase Agreement.

(e) Notwithstanding any provision hereof to the contrary, in lieu of complying with the provisions of this Section 4.1, the Company may elect to give notice to the Investors within thirty (30) days after the issuance of New Securities. Such notice shall describe the type, price, and terms of the New Securities. Each Investor shall have twenty (20) days from the date notice is given to elect to purchase up to the number of New Securities that would, if purchased by such Investor, maintain such Investor's percentage-ownership position, calculated as set forth in Section 4.1(b) before giving effect to the issuance of such New Securities. The closing of such sale shall occur within sixty (60) days of the date notice is given to the Investors.

4.2 Termination. The covenants set forth in Section 4.1 shall terminate and be of no further force or effect (A) immediately before the consummation of the earliest to occur of (A) the IPO or (B) a SPAC Transaction, (B) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act due to shares of the Company, or a parent of the Company, being listed on a national securities exchange or trading system, or (C) upon the closing of a Deemed Liquidation Event, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. At all times the Company will maintain directors' and officers' liability, employment practices liability, and product liability insurance in amounts and on terms to be determined by the Board. For so long as any Series C Director (as defined in the Certificate of Incorporation) is serving on the Board, the Company shall, no later than thirty (30) calendar days after each expiration or renewal date of such directors' and officers' liability insurance policy, deliver to each Investor that designated a Series C Director then serving on the Board a copy of the new or renewed directors' and officers' liability insurance policy (and evidence of such renewal thereof, if applicable) and written confirmation that such policy remains in effect.

5.2 Key Person Insurance. The Company shall maintain key person insurance on the life of Rachel E. Haurwitz, in amounts satisfactory to the Board, with the Company as a beneficiary and shall use commercially reasonable efforts to cause such insurance to be maintained until such time as the Board, including a majority of the Preferred Directors, determines that such insurance should be discontinued.

5.3 Employee Agreements. The Company will cause each person now or hereafter employed by it or by any wholly owned subsidiary with access to confidential information and/or trade secrets to enter into a confidential information and invention assignment agreement or similar agreement.

5.4 Board Matters. The Company shall reimburse the non-employee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board. As long as the holders of Series C Preferred Stock have the right to designate a Series C Director, the Company shall permit at least one (1) Series C Director to serve on each committee of the Board.

5.5 Right to Conduct Activities. The Company hereby agrees and acknowledges that each of the Lead Investors (together with its Affiliate funds) is a professional investment organization and AbbVie makes similar investments consistent with a professional investment organization, and as such reviews the business plans and related proprietary information of many enterprises, some of which may compete directly or indirectly with the Company's business (as currently conducted or as currently propose to be conducted). Nothing in this Agreement shall preclude or in any way restrict the Lead Investors (or its Affiliate funds) and AbbVie from evaluating or purchasing securities, including publicly traded securities, of a particular enterprise, or investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company; and the Company hereby agrees that, to the extent permitted under applicable law, none of the Lead Investors (or their respective Affiliate funds) and AbbVie shall be liable to the Company for any claim arising out of, or based upon, (i) the investment by such Lead Investor (or its Affiliate funds) and AbbVie in any entity competitive with the Company, or (ii) actions taken by any partner, officer, employee or other representative of such Lead Investor (or its Affiliate funds) and AbbVie to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Lead Investors (or its Affiliate funds) and AbbVie from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement, or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

5.6 Termination of Covenants. The covenants set forth in this Section 5 shall terminate and be of no further force or effect (i) immediately before the consummation of the earliest to occur of (A) the IPO or (B) a SPAC Transaction, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or

15(d) of the Exchange Act due to shares of the Company, or a parent of the Company, being listed on a national securities exchange or trading system, or (iii) upon the closing of a Deemed Liquidation Event, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 250,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Section 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided, further, that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the laws of the State of Delaware without regard to conflict of law principles.

6.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, such as, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, it shall be sent to Caribou Biosciences, Inc., 2929 7th Street, Suite 105, Berkeley, CA 94710, Attention: Chief Legal Officer, email legalnotices@cariboubio.com; and a copy (which shall not constitute notice) shall also be sent to Reed Smith LLP, 1901 Avenue of the Stars, Suite 700, Los Angeles, California 90067, email amukhey@reedsmith.com, Attention: Ashok Mukhey, Esq., and if notice is given to an Investor, a copy shall also be given to such counsel as may appear with such Investor's address on Schedule A hereto.

6.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Section 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Section 2.12(c) shall be deemed to be a waiver); provided, further, that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, (a) except as provided in clause (c) of this sentence, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction; (b) the definition of "Competitor" and this clause (b) may not be amended, terminated or waived without the written consent of PIC, NIBR, DuPont, F-Prime Capital Partners Healthcare Fund IV LP, Anterra F&A Ventures I Coöperatief U.A., PFM, Zone III Healthcare Holdings, LLC, RIDGEBACK CAPITAL INVESTMENTS LP, or AbbVie Inc., as the case may be, to the extent such Person is affected by such amendment, termination or waiver (it being understood that any such written consent by the Investor shall constitute consent on behalf of such Investor's Affiliates and/or Affiliate funds, as applicable), (c) the waiver of the provisions of Section 4 with respect to a particular transaction, and any amendment of this clause (c), shall require, in addition to any other approval requirements under this Agreement, the written consent of the holders of at least two-thirds (2/3rds) of the then outstanding shares of Series C Preferred Stock and if any holders of Series C Preferred Stock purchase securities in such transaction, such two-thirds (2/3rds) of the then outstanding shares of Series C Preferred Stock must include each Lead Investor; (d) Section 1.16, Section 5.5 and this clause (d) may not be amended or waived without the written consent of each Lead Investor and (e) Section 5.5 and this clause (e) may not be amended or waived with respect to AbbVie without the written consent of AbbVie Inc. The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Section 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Series C Preferred Stock after the date hereof pursuant to the Purchase Agreement, any purchaser of such shares of Series C Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

6.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.13 Tekla Funds. A copy of the Declaration of Trust, as amended and restated, for each of Tekla Healthcare Investors and Tekla Life Sciences Investors (together, the "**Tekla Funds**") is on file with the Secretary of State of The Commonwealth of Massachusetts, and notice is hereby given that this Agreement is executed on behalf of the Tekla Funds by an officer or trustee of the Tekla Funds in his or her capacity as an officer or trustee of the Tekla Funds, and not individually and that the obligations of or arising out of this Agreement are not binding upon any of the trustees, officers or shareholders individually but are binding only upon the assets and property of each of the respective Tekla Funds.

[The remainder of this page is left intentionally blank.]

IN WITNESS WHEREOF, the parties have executed this **Seconded Amended and Restated Investors' Rights Agreement** as of the date first written above.

COMPANY:

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

PFM Healthcare Master Fund, L.P.
By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

Partner Investments, L.P.
By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

PFM Healthcare Growth Equity Holdings I, LLC
By: PFM Health Sciences GP, LLC, its member manager

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

ZONE III HEALTHCARE HOLDINGS, LLC

By: Farallon Capital Management, L.L.C., its Manager

By: /s/ Philip Dreyfuss
Name: Philip Dreyfuss
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

RIDGEBACK CAPITAL INVESTMENTS LP
by RIDGEBACK CAPITAL MANAGEMENT LLC its
Fund Manager:

By: /s/ Christian Sheldon
Name: Christian Sheldon
Title: COO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

AbbVie Inc.

By: /s/ Adam Houghton
Name: Adam Houghton
Title: VP & Head, AbbVie Ventures

SIGNATURE PAGE TO SECOND AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

MAVERICK VENTURES INVESTMENT FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

MAVERICK ADVISORS FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Adage Capital Partners, LP
By: Adage Capital Partners. GP, LLC, it's General Partner
By: Adage Capital Advisors, LLC it's Managing Member

By: /s/ Dan Leham
Name: Dan Leham
Title: Chief Operating Officer

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Janus Henderson Capital Funds plc on behalf of its series Janus Henderson Global Life Sciences Fund

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

Janus Henderson Biotech Innovation Master Fund Limited

By: Janus Capital Management LLC, its investment advisor
By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

CAROLEM CAPITAL LLC

By /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Central Valley Administrators, Inc.

By: /s/Richard Merkin
Name: Richard Merkin
Title: President

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

AngelList-Cces-Fund, a series of AngelList-JR-Funds, LLC

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

AngelList-Cces-PR-Fund, a series of AngelList-JR-Funds, LLC

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Jenny Rooke

By: /s/ Jenny Rooke

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Point72 Biotech Private Investments, LLC

By: /s/ Vincent Tortorella
Name: Vincent Tortorella
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

NRG CAPITAL HOLDINGS LLC

By: /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

LLS TAP, LLC

By: /s/ Louis DeGennaro
Name: Louis DeGennaro
Title: President & CEO

By: /s/ Gordon Miller
Name: Gordon Miller
Title: EVP & CFO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Tekla Healthcare Investors*

By: /s/ Daniel R. Omstead
Name: Daniel R. Omstead
Title: President

* The name Tekla Healthcare Investors is the designation of the Trustees for the time being under an Amended & Restated Declaration of Trust dated April 21, 1987, as amended, and all persons dealing with Tekla Healthcare Investors must look solely to the trust property for the enforcement of any claim against Tekla Healthcare Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Healthcare Investors.

Tekla Life Sciences Investors*

By: /s/ Daniel R. Omstead
Name: Daniel R. Omstead
Title: President

* The name Tekla Life Sciences Investors is the designation of the Trustees for the time being under a Declaration of Trust dated February 20, 1992, as amended, and all persons dealing with Tekla Life Sciences Investors must look solely to the trust property for the enforcement of any claim against Tekla Life Sciences Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Life Sciences Investors.

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

PONTIFAX GLOBAL FOOD AND AGRICULTURE TECHNOLOGY FUND, L.P.

By: /s/ Benjamin Belldegrun
Name: Benjamin Belldegrun
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Monashee Solitario Fund LP

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

DS Liquid Div RVA MON LLC

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

James and Jennifer Doudna Cate Living Trust DTD 01/02/2014

By: /s/ Jennifer Doudna
Name: Jennifer Doudna
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Rodolphe and Lisa Barrangon

By: /s/ Rodolphe Barrangon

By: /s/ Lisa Barrangon

IN WITNESS WHEREOF, the parties have executed this Second Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTORS:

Mintz Levin Special Investments Fund LLC

By: /s/ Megan N. Gates
Name: Megan N. Gates
Title: Member

Mintz Levin Special Investments Fund LLC - Series FY21

By: /s/ Megan N. Gates
Name: Megan N. Gates
Title: Member

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

F-PRIME CAPITAL PARTNERS HEALTHCARE FUND IV LP

By: F-Prime Capital Partners Healthcare Advisors Fund IV LP, its General Partner
By: Impresa Holdings LLC, its General Partner
By: Impresa Management LLC, its Managing Member

By: /s/ Mary Bevelock Pendergast
Name: Mary Bevelock Pendergast
Title: Vice President

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Zachary A. Robbins Trust dtd December 31, 1987

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Robbins Family Trust of 1986

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Lucas Hamilton Robbins Trust dtd November 17, 1991

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Avidity Master Fund LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

Avidity Capital Fund II LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Anterra F&A Ventures I Coöperatief U.A.

By: /s/ Adam Sanders
Name: Adam Sanders
Title: Director

By: /s/ Martin Goossens
Name: Martin Goossens
Title: Director

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Novartis Institutes for BioMedical Research, Inc.

By: /s/ Scott A Brown
Name: Scott A Brown
Title: VP CAO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

INVUS PUBLIC EQUITIES, L.P.

By: /s/ Raymond Debbane
Name: Raymond Debbane
Title: President of its General Partner

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

CA Fund I, a series of 5 Prime Ventures, LP
By: Fund GP, LLC its General Partner
By: Belltower Fund Group, Ltd. Manager of the General Partner

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

LifeSci Venture Partners II, LP

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

LifeSci Venture Master SPV, LLC

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investon' Rights Agreement** as of the date first written above.

INVESTORS:

James Berger & Marian Feldman

By: /s/ James Berger

By: /s/ Marian Feldman

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

E. I. du Pont de Nemours and Company

By: /s/ George J. Duko
Name: George J. Duko
Title: Vice President, Mergers & Acquisitions

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

HEALTHCARE INNOVATION INVESTMENT FUND LLC

By: /s/ Joseph R. Gentile
Name: Joseph R. Gentile
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Avego Bioscience Capital, L.P.

By: Avego Bioscience Capital GP, LLC, its general partner

By: /s/ James Flexner
Name: James Flexner
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Pacific Continental Investment Company, LLC

By: /s/ Marc Stridiron
Name: Marc Stridiron
Title: Portfolio Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

Pig Improvement Company UK Limited

By: /s/ Stephen Wilson
Name: Stephen Wilson
Title: CEO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Investors' Rights Agreement** as of the date first written above.

INVESTORS:

WS Investment Company, LLC (21A)

By: /s/ James Terranova
Name:
Title:

WS Investment Company, LLC (2014A)
By: /s/ James Terranova
Name:
Title:

WS Investment Company, LLC (2015A)
By: /s/ James Terranova
Name:
Title:

SCHEDULE A

Investors

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.1

Execution Version

CONFIDENTIAL

COLLABORATION AND LICENSE AGREEMENT

Between

CARIBOU BIOSCIENCES, INC.

And

ABBVIE MANUFACTURING MANAGEMENT UNLIMITED COMPANY

Dated as of February 9, 2021

TABLE OF CONTENTS

COLLABORATION AND LICENSE AGREEMENT

This Collaboration and License Agreement (the "**Agreement**") is made and entered into effective as of February (the "**Effective Date**") by and between Caribou Biosciences, Inc., a Delaware corporation with its principal place of business at 2929 Seventh St., Suite 105, Berkeley, CA 94710 ("**Caribou**"), and AbbVie Manufacturing Management Unlimited Company, a private unlimited company incorporated under the laws of Ireland with its principal place of business at 2.3 Woodford Business Park, Santry, Dublin 9, Ireland ("**AbbVie**"). Caribou and AbbVie are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**."

Recitals

WHEREAS, Caribou is a biopharmaceutical company focused on CRISPR-Cas genome editing;

WHEREAS, AbbVie possesses expertise in the research, development, manufacturing, and commercialization of human pharmaceuticals; and

WHEREAS, Caribou and AbbVie desire to engage in a research collaboration in which Caribou will carry out certain pre-clinical research and development activities directed to allogeneic CAR-T products as set forth in the applicable Research Plan (as defined herein), and pursuant to which AbbVie will assume further development and commercialization of Licensed Products (as defined herein) containing or comprising certain Collaboration CAR-T Products (as defined herein) developed pursuant to a Research Plan, worldwide, in each case as set forth in, and subject to the terms of, this Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual promises and conditions hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, do hereby agree as follows:

ARTICLE 1
DEFINITIONS

Unless otherwise specifically provided herein, the following terms shall have the following meanings:

1.1 "**AbbVie**" has the meaning set forth in the preamble hereto.

1.2 "**AbbVie Background IP**" means the AbbVie Background Know-How and the AbbVie Background Patents.

1.3 "**AbbVie Background Know-How**" means all Know-How that is (a) owned or Controlled by AbbVie or any of its Affiliates as of the Effective Date or at any time during the Term and (b) necessary or reasonably useful for Developing or Manufacturing any Collaboration CAR-T Products or Licensed Products, but *excluding* any AbbVie Collaboration Know-How.

1.4 "**AbbVie Background Patents**" means all of the Patents that are (a) owned or Controlled by AbbVie or any of its Affiliates as of the Effective Date or at any time during the Term and (b) necessary or reasonably useful (or, with respect to Patent applications, would be necessary or reasonably useful if such Patent applications were to issue as Patents) for Developing or Manufacturing any Collaboration CAR-T Products or Licensed Products in the Field in the Territory, but *excluding* any AbbVie Collaboration Patents.

1.5 "**AbbVie Collaboration Inventions**" means any and all Collaboration Inventions other than Caribou Collaboration Inventions.

1.6 "**AbbVie Collaboration IP**" means the AbbVie Collaboration Inventions, the AbbVie Collaboration Know-How and the AbbVie Collaboration Patents.

1.7 "**AbbVie Collaboration Know-How**" means any and all Collaboration Know-How other than Caribou Collaboration Know-How. [***]

1.8 "**AbbVie Collaboration Patents**" means any and all Collaboration Patents other than Caribou Collaboration Patents. [***]

1.9 "**AbbVie Indemnitees**" has the meaning set forth in Section 10.2.

1.10 "**AbbVie IP**" means the AbbVie Background IP and the AbbVie Collaboration IP.

1.11 "**AbbVie Know-How**" means the AbbVie Background Know-How and the AbbVie Collaboration Know-How.

[***]

1.13 "**AbbVie Patents**" means the AbbVie Background Patents and the AbbVie Collaboration Patents.

1.14 "**AbbVie Payment Obligations**" has the meaning set forth in Section 3.4.1.

[***]

1.16 "**AbbVie-Retained Third Party Provider**" has the meaning set forth in Section 3.9.3.

1.17 "**AbbVie** [***]" means a [***] (a) owned or Controlled by AbbVie or its Affiliates, and (b) contributed for use in a Collaboration CAR by AbbVie in its sole discretion. [***]

1.18 "**AbbVie Sublicense Provisions**" has the meaning set forth in Section 5.6.4.

1.19 "**Accepted Target**" has the meaning set forth in Section 3.2.6.

1.20 "**Accounting Standards**" means, with respect to a Party, that such Party shall maintain records and books of accounts in accordance with United States Generally Accepted Accounting Principles, consistently applied.

1.21 "**Acquisition**" means, with respect to a Party, a merger, acquisition (whether of all of the stock or all or substantially all of the assets of a Person or any operating or business division of a Person) or similar transaction by or with the Party, other than a Change in Control of the Party.

1.22 [***]

1.23 "**Additional Program Slot Fee**" has the meaning set forth in Section 6.3.

1.24 "**Additional Program Slot Period**" means the period beginning on the Effective Date and ending on the earlier of (a) the sixtieth (60th) calendar day following completion of Phase I Clinical Studies for the first Licensed Product under the Initial Program Slot; and (b) December 31, 2025.

[***]

1.26 "**Adverse Ruling**" has the meaning set forth in Section 11.2.1.

1.27 "**Affiliate**" means any corporation or other business entity or Person that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with a Party for so long as such control exists. For purposes of this definition, the term "control" (including, the correlative meanings, "controlled

by" and "under common control with") means (a) the direct or indirect ownership of at [***] of the stock, voting securities or other ownership interest of a Person (or, with respect to a limited partnership or other similar entity, its general partner or controlling entity), or (b) the possession, directly or indirectly, of the ability to direct or otherwise control the management or policies of a Person, whether through the ownership of voting securities, by contract relating to voting rights or corporate governance, or otherwise.

1.28 "**Agreement**" has the meaning set forth in the preamble hereto.

1.29 "**Alliance Manager**" has the meaning set forth in Section 2.6.

1.30 "**Annual Net Sales-Based Milestone Payment**" has the meaning set forth in Section 6.4.2.

1.31 "**Annual Net Sales-Based Milestone Payment Date**" has the meaning set forth in Section 6.4.2.

1.32 "**Annual Net Sales-Based Milestone Table**" has the meaning set forth in Section 6.4.2.

1.33 "**Annual Net Sales-Based Milestone Threshold**" has the meaning set forth in Section 6.4.2.

1.34 "**Applicable Law**" means federal, state, local, national and supra-national laws, statutes, rules, and regulations, including any rules, regulations, regulatory guidelines, or other requirements of the Regulatory Authorities, major national securities exchanges or major securities listing organizations, that may be in effect from time to time during the Term and applicable to a particular activity or country or other jurisdiction hereunder.

[***]

1.36 "**Audit Arbitrator**" has the meaning set forth in Section 6.14.

1.37 "**Bankruptcy Cod**e" has the meaning set forth in Section 11.5.1.

[***]

1.39 "**Biosimilar Application**" has the meaning set forth in Section 7.3.3.

1.40 "**Biosimilar Product**" means, with respect to a Licensed Product and on a country-by-country basis, a biologic product (a) whose Regulatory Approval, or whose application for such Regulatory Approval, relies in whole or in part on a prior Regulatory Approval granted to the Licensed Product; (b) whose Regulatory Approval, or whose application for such Regulatory Approval, relies in whole or in part on any data generated in support of a prior Regulatory Approval granted to the Licensed Product; or (c) which is determined by the FDA or a foreign counterpart thereof to be biosimilar to or interchangeable with such Licensed Product, as set forth at 42 U.S.C. § 262(k) or a foreign equivalent thereof.

1.41 "**BLA**" has the meaning set forth in the definition of "Drug Approval Application."

[***]

[***]

1.44 "**Blocking Platform In-License**" has the meaning set forth in Section 5.6.3.

1.45 "**Blocking Platform IP**" has the meaning set forth in Section 5.6.3.

1.46 "**Board of Directors**" has the meaning set forth in the definition of "Change in Control."

1.47 "**Breaching Party**" has the meaning set forth in Section 11.2.1.

1.48 "**Business Day**" means a day other than a Saturday or Sunday on which banking institutions in Chicago, Illinois are open for business.

1.49 "**Calendar Quarter**" means each successive period of three (3) calendar months commencing on January 1, April 1, July 1 and October 1, except that the first Calendar Quarter of the Term shall commence on the Effective Date and end on the day immediately prior to the first to occur of January 1, April 1, July 1 or October 1 after the Effective Date, and the last Calendar Quarter shall end on the last day of the Term.

1.50 "**Calendar Year**" means each successive period of twelve (12) calendar months commencing on January 1 and ending on December 31, except that the first Calendar Year of the Term shall commence on the Effective Date and end on December 31 of the year in which the Effective Date occurs and the last Calendar Year of the Term shall commence on January 1 of the year in which the Term ends and end on the last day of the Term.

1.51 "**CAR**" means chimeric antigen receptor.

1.52 "**Caribou**" has the meaning set forth in the preamble hereto.

1.53 "**Caribou Background IP**" means the Caribou Background Know-How and the Caribou Background Patents.

1.54 "**Caribou Background Know-How**" means the Caribou Cas12a chRDNA Technology Know-How, the Caribou CAR-T Technology Know-How, the Program Materials and the Program Confidential Information, and all other Know-How that is [***].

1.55 "**Caribou Background Patents**" means the Caribou Cas12a chRDNA Technology Patents, the Caribou CAR-T Technology Patents, and all other Patents that are [***].

[***]

1.62 "**Caribou CAR-T Technology**" means all technology (a) owned or Controlled by Caribou or any of its Affiliates on the Effective Date or at any time during the Term, and (b) directed to [***].

1.63 "**Caribou CAR-T Technology Know-How**" means all Know-How that (a) is owned or Controlled by Caribou or any of its Affiliates as of the Effective Date or during the Term and (b) relates to the Caribou CAR-T Technology.

1.64 "**Caribou CAR-T Technology Patents**" means all of the Patents that (a) are owned or Controlled by Caribou or any of its Affiliates as of the Effective Date or during the Term and (b) cover the Caribou CAR-T Technology or the Exploitation thereof. The Caribou CAR-T Technology Patents existing as of the Effective Date are listed on attached Schedule 1.64.

1.65 "**Caribou Cas12a chRDNA Technology**" means all technology (a) owned or Controlled by Caribou or any of its Affiliates on the Effective Date or at any time during the Term, and (b) [***].

1.66 "**Caribou Cas12a chRDNA Technology Know-How**" means all Know-How that (a) is owned or Controlled by Caribou or any of its Affiliates as of the Effective Date or during the Term and (b) relates to the Caribou Cas12a chRDNA Technology.

1.67 "**Caribou Cas12a chRDNA Technology Patents**" means all of the Patents that (a) are owned or Controlled by Caribou or any of its Affiliates as of the Effective Date or during the Term and (b) cover the Caribou Cas12a chRDNA Technology or the Exploitation thereof. The Caribou Cas12a chRDNA Technology Patents existing as of the Effective Date are listed on attached Schedule 1.67.

1.68 "**Caribou Collaboration Invention**" means any and all Collaboration Inventions related generally to the Caribou Cas12a chRDNA Technology or Caribou CAR-T Technology, and any and all Collaboration [***] Inventions solely owned by Caribou pursuant to Section 3.4.1.

1.69 "**Caribou Collaboration IP**" means the Caribou Collaboration Inventions, the Caribou Collaboration Know-How and the Caribou Collaboration Patents.

1.70 "**Caribou Collaboration Know-How**" means any and all Collaboration Know-How related generally to the Caribou Cas12a chRDNA Technology or Caribou CAR-T Technology, and any and all Collaboration [***] Know-How solely owned by Caribou pursuant to Section 3.4.1. [***].

1.71 "**Caribou Collaboration Patents**" means any and all Collaboration Patents related generally to the Caribou Cas12a chRDNA Technology or Caribou CAR-T Technology, and any and all Collaboration [***] Patents solely owned by Caribou pursuant to Section 3.4.1. [***].

1.72 "**Caribou Excluded Know-How**" means any Know-How owned or Controlled by Caribou or any of its Affiliates as of the Effective Date or at any time during the Term:

[***]

1.73 "**Caribou Excluded Patents**" means any Patents owned or Controlled by Caribou or any of its Affiliates as of the Effective Date or at any time during the Term:

[***]

1.74 "**Caribou Indemnitees**" has the meaning set forth in Section 10.1.

1.75 "**Caribou IP**" means the Caribou Background IP, the Caribou Collaboration IP, and Caribou's right and interest in and to the Collaboration [***] IP.

1.76 "Caribou Know-How" means the Caribou Background Know-How, the Caribou Collaboration Know-How, and Caribou's right and interest in and to Collaboration [***] Know-How.

[***]

1.78 "**Caribou Owned Pre-Existing Know-How**" has the meaning set forth in Section 9.2.1.

1.79 "**Caribou Owned Pre-Existing Patents**" has the meaning set forth in Section 9.2.1.

1.80 "**Caribou Patents**" means the Caribou Background Patents, the Caribou Collaboration Patents, and Caribou's right and interest in and to the Collaboration [***] Patents.

1.81 "**Caribou Platform Technology**" means all Caribou Cas12a chRDNA Technology and all Caribou CAR-T Technology owned or Controlled by Caribou or any of its Affiliates on the Effective Date or at any time during the Term that is necessary or reasonably useful for the Exploitation of the Collaboration CAR-T Products or the Licensed Products. [***]

[***]

1.85 "**Caribou Product**" means any product that (a) is not a Collaboration CAR-T Product, a Licensed Product, or a product conceived, discovered, developed, or otherwise made under this Agreement and (b) Caribou (or its Affiliates or (sub)licensees) is Exploiting outside the scope of this Agreement.

[***]

1.87 [***]

[***]

1.90 "**Cas12a chRDNA Compositions**" has the meaning set forth in the definition of "Caribou Cas12a chRDNA Technology."

1.91 "**Centralized Approval Procedure**" means the procedure through which a MAA filed with the EMA results in a single marketing authorization valid throughout the European Union.

1.92 "**Change in Control**" with respect to a Party, shall be deemed to have occurred if any of the following occurs after the Effective Date:

1.92.1 any "person" or "group" (as such terms are defined below) acquires or becomes the "beneficial owner" (as defined below), directly or indirectly, of (a) shares of capital stock or other interests (including partnership interests) of such Party then outstanding and normally entitled (without regard to the occurrence of any contingency) to vote in the election of the directors, managers or similar supervisory positions ("**Voting Stock**") of such Party representing [***] or more of the total voting power of all outstanding classes of Voting Stock of such Party or (b) the power to elect a majority of the members of the Party's board of directors, or similar governing body ("**Board of Directors**"); or

1.92.2 such Party enters into a merger, consolidation or similar transaction with another Person (whether or not such Party is the surviving entity) and as a result of such merger, consolidation or similar transaction (a) the members of the Board of Directors of such Party immediately prior to such transaction constitute less than a majority of the members of the Board of Directors of such Party or such surviving Person immediately following such transaction or (b) the Persons that beneficially owned, directly or indirectly, the shares of Voting Stock of such Party immediately prior to such transaction cease to beneficially own, directly or indirectly, shares of Voting Stock of such Party representing at least a majority of the total voting power of all outstanding classes of Voting Stock of the surviving Person in substantially the same proportions as their ownership of Voting Stock of such Party immediately prior to such transaction; or

1.92.3 such Party sells or transfers to any Third Party, in one (1) or more related transactions, properties or assets representing all or substantially all of such Party's consolidated total assets; or

1.92.4 the holders of capital stock of such Party approve a plan or proposal for the liquidation or dissolution of such Party.

1.92.5 For the purpose of this definition of Change in Control, (a) "person" and "group" have the meanings given such terms under Section 13(d) and 14(d) of the Securities Exchange Act and the term "group" includes any group acting for the purpose of acquiring, holding or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Securities Exchange Act; (b) a "beneficial owner" shall be determined in accordance with Rule 13d-3 under the Securities Exchange Act; and (c) the terms "beneficially owned" and "beneficially own" shall have meanings correlative to that of "beneficial owner."

1.93 "**chRDNA**" has the meaning set forth in the definition of "Caribou Cas12a chRDNA Technology."

[***]

1.95 "**Clinical Data**" means all Information with respect to any Collaboration CAR-T Products or Licensed Products which is made, collected, or otherwise generated under or in connection with Clinical Studies or Phase IV Studies, including any data (including raw data), reports, and results with respect thereto.

1.96 "**Clinical Studies**" means Phase 0, Phase I, Phase II, Phase III, and such other tests and studies in human subjects that are required by Applicable Law, or otherwise recommended by the Regulatory Authorities, to obtain or maintain any Regulatory Approval for a Licensed Product for one (1) or more indications, including tests or studies that are intended to expand the Product Labeling for such Licensed Product with respect to such indication.

1.97 "[***] **IP**" means the [***] Know-How and the [***] Patents.

1.98 "[***] **Know-How**" means all Know-How that (a) is owned or Controlled by Caribou or any of its Affiliates as of the Effective Date and during the Term and (b) relates to a [***]; but *excluding* any Caribou Excluded Know-How.

1.99 "[***] **Patents**" means all of the Patents that (a) are owned or Controlled by Caribou or any of its Affiliates as of the Effective Date and during the Term and (b) cover a [***] or the Exploitation thereof; but *excluding* any Caribou Excluded Patents.

1.100 "**Collaboration** [***] **Inventions**" means any and all Collaboration Inventions that are (i) conceived, discovered, developed, reduced to practice or otherwise made under this Agreement by or on behalf of either Party (or its Affiliate), either alone or jointly, [***], through practicing the [***], and (ii) not related to (a) a Collaboration CAR-T Product or a Licensed Product [***] conceived, discovered, developed, reduced to practice or otherwise made under this Agreement, or (d) a molecule, cell, composition, sequence, or vector comprising or encoding any of the foregoing, or (e) the Exploitation of any of the foregoing.

1.101 "**Collaboration** [***] **IP**" means the Collaboration [***] Inventions, the Collaboration [***] Know-How, and the Collaboration [***] Patents.

1.102 "**Collaboration** [***] **Know-How**" means any and all Collaboration Know-How that are (i) conceived, discovered, developed, reduced to practice or otherwise made under this Agreement by or on behalf of either Party (or its Affiliate), either alone or jointly, [***], through practicing the [***], and (ii) not related to (a) a Collaboration CAR-T Product or a Licensed Product [***] conceived, discovered, developed, reduced to practice or otherwise made under this Agreement, or (d) a molecule, cell, composition, sequence, or vector comprising or encoding any of the foregoing, or (e) the Exploitation of any of the foregoing.

1.103 "**Collaboration** [***] **Patents**" means any and all Collaboration Patents that claim inventions that are (i) conceived, discovered, developed, reduced to practice or otherwise made under this Agreement by or on behalf of either Party (or its Affiliate), either alone or jointly, [***], through practicing the [***], and (ii) not related to (a) a Collaboration CAR-T Product or a Licensed Product [***] conceived, discovered, developed, reduced to practice or otherwise made under this Agreement, or (d) a molecule, cell, composition, sequence, or vector comprising or encoding any of the foregoing, or (e) the Exploitation of any of the foregoing.

1.104 "**Collaboration CAR**" means a recombinant protein comprising (a) an extracellular domain that includes [***].

1.105 "**Collaboration CAR-T Product**" means (a) any T cell modified with the Caribou Cas12a chRDNA Technology or, [***], with the [***] that (i) is Developed under this Agreement and (ii) [***]

1.106 "**Collaboration Inventions**" has the meaning set forth in Section 7.1.4.

1.107 "**Collaboration IP**" means the Collaboration Inventions, the Collaboration Know-How, and the Collaboration Patents.

1.108 "**Collaboration Know-How**" means any and all Know-How that is conceived, discovered, developed, reduced to practice or otherwise made (a) by or on behalf of either Party (or its Affiliates); or (b) jointly by or on behalf of AbbVie (or its Affiliates), on the one hand, and Caribou (or its Affiliates), on the other hand, in each case ((a) and (b)), under this Agreement.

1.109 "**Collaboration Patents**" means any and all Patents that claim an invention conceived, discovered, developed, reduced to practice or otherwise made (a) by or on behalf of either Party (or its Affiliates); or (b) jointly by or on behalf of AbbVie (or its Affiliates), on the one hand, and Caribou (or its Affiliates), on the other hand; in each case ((a) and (b)), under this Agreement.

1.110 "**Combination Product**" means a Licensed Product that is (a) sold in the form of a combination product containing both a Collaboration CAR-T Product as an active pharmaceutical ingredient, and another active pharmaceutical ingredient; or (b) sold together with another product, process, service or therapy that is administered separately from the Licensed Product, in each case ((a) and (b)) sold as a unit at a single price and *excluding* any Delivery System.

1.111 "**Commercialization**" means any and all activities related to the preparation for sale of, offering for sale of, or sale of a Collaboration CAR-T Product or Licensed Product, including activities related to marketing, promoting, distributing, importing and exporting such Collaboration CAR-T Product or Licensed Product, and interacting with Regulatory Authorities or other governmental authorities regarding any of the foregoing. When used as a verb, "to Commercialize" and "Commercializing" means to engage in Commercialization, and "Commercialized" has a corresponding meaning.

1.112 "**Commercially Reasonable Efforts**" means,

1.112.1 with respect to the efforts and resources to be expended by AbbVie with respect to any objective, activity or decision to be undertaken with respect to the Development, Commercialization, or Manufacture of a Collaboration CAR-T Product or Licensed Product, the efforts and resources to accomplish such objective, activity or decision that would be comparable with the efforts and resources that AbbVie would normally use in the exercise of its reasonable business discretion to accomplish a similar objective, activity or decision with respect to a compound or product that is at a similar stage in its development or product life, is in a similar therapeutic and disease area and is of similar market potential, taking into account all relevant factors (including legal, medical, scientific, technical and commercial factors), including, expected and actual issues of efficacy, safety and manufacturing, and expected and actual approved labeling, including the discovery of unanticipated toxicity or any material adverse event or condition relating to the safety or efficacy of such Collaboration CAR-T Product or Licensed Product; the expected and actual competitiveness of alternative products (including Biosimilar Products); adverse changes in the market conditions that affect the market potential of such Collaboration CAR-T Product or Licensed Product generally or any particular indication of such Collaboration CAR-T Product or Licensed Product; the expected and actual profile of such Collaboration CAR-T Product or Licensed Product, including the existence of failed or inconclusive Clinical Studies; the nature and extent of expected and actual market exclusivity (including patent coverage, regulatory and other exclusivity) of such Collaboration CAR-T Product or Licensed Product; the likelihood and expected scope of Regulatory Approval given the regulatory structure involved, including regulatory or data exclusivity and pricing and reimbursement approval by governmental and private payors, including formulary positioning; changes in clinical or regulatory strategy justified by compliance with the requirements of regulatory feedback from any Regulatory Authority; and the expected and actual profitability and return on investment of such Collaboration CAR-T Product or Licensed Product; and

1.112.2 with respect to the efforts and resources to be expended by Caribou with respect to an objective, activity or decision to be undertaken by Caribou hereunder, such reasonable, diligent, and good faith efforts that would be comparable with the efforts and resources that Caribou would normally use in the exercise of its reasonable business discretion (but in no event less than the efforts and resources that would normally be used by a company in the biotechnology industry of comparable size, resources, and structure to Caribou) to accomplish a similar objective, activity or decision with respect to research and development of novel biopharmaceutical products.

1.112.3 In addition, with regard to AbbVie's obligations relating to the Development and Commercialization of Collaboration CAR-T Products(s) and Licensed Products hereunder, "Commercially Reasonable Efforts" shall be determined on a country-by-country or market-by-market basis (as most applicable) and indication-by-indication basis for a particular product, and it is anticipated that the level of effort will change over time, including to reflect changes in the status of the product and the countries (or markets) involved.

1.112.4 For purposes of clarity, where a Party has an obligation to use Commercially Reasonable Efforts, the efforts of such Party and its Affiliates, subcontractors and (sub)licensees/Sublicensees shall be considered in determining whether such Party has satisfied such obligation.

1.113 "**Committee**" has the meaning set forth in Section 2.2.5.

1.114 "**Companion Diagnostic Field**" means all human uses as a companion diagnostic.

1.115 "**Companion Diagnostic Product**" means a product used as a companion product to a Collaboration CAR-T Product or a Licensed Product for the purpose of assessing applicability of the Collaboration CAR-T Product or Licensed Product to a specific individual.

1.116 "**Company Participation Right**" has the meaning set forth in Section 6.2.

1.117 "**Confidential Information**" means any information or data provided orally, visually, in writing or other form by or on behalf of one (1) Party (or an Affiliate or representative of such Party) to the other Party (or to an Affiliate or representative of such Party) in connection with this Agreement, whether prior to, on, or after the Effective Date, including information relating to the terms of this Agreement, the Collaboration CAR-T Product or the Licensed Product, any Exploitation of the Collaboration CAR-T Product the Licensed Product, any know-how with respect thereto developed by or on behalf of the disclosing Party or its Affiliates (including AbbVie Know-How and Caribou Know-How, as applicable), or the scientific, regulatory or business affairs or other activities of either Party.

1.118 "**Control**" means, with respect to any item of Information, Regulatory Documentation, material, Patent, or other property right, the possession of the right, whether directly or indirectly, and whether by ownership, license, covenant not to sue or otherwise (other than by operation of the Licenses and other grants in Sections 5.1 or 5.2), to grant a license, sublicense or other right (including the right to reference Regulatory Documentation) to or under such Information, Regulatory Documentation, material, Patent, or other property right as provided for herein without violating the terms of any agreement or other arrangement with any Third Party.

1.119 "**Convicted Entity**" has the meaning set forth in Section 9.2.19.

1.120 "**Convicted Individual**" has the meaning set forth in Section 9.2.19.

1.121 "**Corporate Names**" means "Caribou Biosciences, Inc." and such other names and logos as Caribou may designate in writing from time to time.

1.122 "**Data Package**" means a report delivered by Caribou to AbbVie for each Program Slot following [***].

1.123 "**Data Security and Privacy Laws**" means all Applicable Law relating to the privacy, Processing, and security of Personal Data.

1.124 "**Debarred Entity**" has the meaning set forth in Section 9.2.19.

1.125 "**Debarred Individual**" has the meaning set forth in Section 9.2.19.

1.126 "**Default Notice**" has the meaning set forth in Section 11.2.

1.127 "**Delivery System**" has the meaning set forth in the definition of "Net Sales."

1.128 "**Development**" means all activities related to research, pre-clinical and other non-clinical testing, test method development and stability testing, toxicology, formulation, process development, manufacturing

scale-up, qualification and validation, quality assurance/quality control, Clinical Studies, including Manufacturing in support thereof, statistical analysis and report writing, the preparation and submission of Drug Approval Applications, regulatory affairs with respect to the foregoing and all other activities necessary or reasonably useful or otherwise requested or required by a Regulatory Authority as a condition or in support of obtaining or maintaining a Regulatory Approval. When used as a verb, "Develop" means to engage in Development. For purposes of clarity, Development shall include any submissions and activities required in support thereof, required by Applicable Law or a Regulatory Authority as a condition or in support of obtaining a pricing or reimbursement approval for an approved Licensed Product.

1.129 "**Disclosure**" has the meaning set forth in Section 8.6.1.

1.130 "**Dispute**" has the meaning set forth in Section 12.8.

1.131 "**Distributor**" has the meaning set forth in Section 5.4.

1.132 "**Dollars**" or "**$**" means United States Dollars.

1.133 "**Drug Approval Application**" means a Biologics License Application (a "**BLA**") as defined in the PHSA, or any corresponding foreign application in the Territory, including, with respect to the European Union, a Marketing Authorization Application (a "**MAA**") filed with the EMA pursuant to the Centralized Approval Procedure or with the applicable Regulatory Authority of a country in Europe with respect to the mutual recognition or any other national approval procedure.

[***]

1.137 "**Effective Date**" means the effective date of this Agreement as set forth in the preamble hereto.

1.138 "**EMA**" means the European Medicines Agency and any successor agency(ies) or authority having substantially the same function.

1.139 "**European Major Markets**" means the following: [***].

1.140 "**European Union**" or "**E.U.**" means the economic, scientific, and political organization of member states known as the European Union, as its membership may be altered from time to time, and any successor thereto.

1.141 "**Excluded Entity**" has the meaning set forth in Section 9.2.19.

1.142 "**Excluded Individual**" has the meaning set forth in Section 9.2.19.

1.143 "**Existing IP Agreements**" means the [***], and any other agreement in effect as of the Effective Date pursuant to which Caribou obtains rights to any Caribou Background IP or [***] IP.

1.144 "**Existing Services Agreement**" has the meaning set forth in Section 3.9.2.

1.145 "**Existing Third Party Provider**" has the meaning set forth in Section 3.9.2.

1.146 "**Exploit**" or "**Exploitation**" means to make, have made, import, use, sell, or offer for sale, including to research, Develop, Commercialize, register, modify, enhance, improve, Manufacture, have Manufactured, hold or keep (whether for disposal or otherwise), formulate, optimize, have used, export, transport, distribute, promote, market, have sold or otherwise dispose of.

1.147 "**Fair Market Value**" has the meaning set forth in Section 3.2.9.

1.148 "**FDA**" means the United States Food and Drug Administration and any successor agency(ies) or authority having substantially the same function.

1.149 "**FDCA**" means the United States Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301 *et seq.*, as amended from time to time, together with any rules, regulations and requirements promulgated thereunder (including all additions, supplements, extensions, and modifications thereto).

1.150 "**Field**" means all human diagnostic, prophylactic and therapeutic uses.

1.151 "**First Commercial Sale**" means, with respect to a Licensed Product and a country, the first sale for monetary value for use or consumption by the end user of such Licensed Product in such country after all Regulatory Approvals for such Licensed Product have been obtained in such country. Sales prior to receipt of all Regulatory Approvals for such Licensed Product, such as so-called "treatment IND sales," "named patient sales," and "compassionate use sales," shall not be construed as a First Commercial Sale.

1.152 "**FTE**" means the equivalent of the work of [***] employee full time for [***] Calendar Year (consisting of at least a total of [***] hours per Calendar Year) of work performing activities for a Collaboration CAR-T Product or Licensed Product. No additional payment shall be made with respect to any person who works more than [***] hours per Calendar Year and any person who devotes less than [***] hours per Calendar Year (or such other number as may be agreed by the JGC, as applicable) shall be treated as an FTE on a *pro rata* basis based upon the actual number of hours worked divided by [***].

1.153 "**FTE Costs**" means, with respect to a Party for any period, the applicable FTE Rate multiplied by the applicable number of FTEs of such Party performing the relevant activities during such period in accordance with the applicable Research Plan.

1.154 "**FTE Rate**" means the applicable FTE rate set forth on attached Schedule 1.154.

1.155 "**Gatekeeper**" has the meaning set forth in Section 3.2.3.

1.156 "**Good Laboratory Practice**" or "**GLP**" means the FDA's standards for conducting non-clinical laboratory studies contained in 21 C.F.R. Part 58, and any equivalent standards promulgated by the EMA.

1.157 "**Good Manufacturing Practice**" or "**GMP**" means the current good manufacturing practices applicable from time to time to the Manufacturing of a Collaboration CAR-T Product or Licensed Product or any intermediate thereof pursuant to Applicable Law.

1.158 "**IND**" means an application filed with a Regulatory Authority for authorization to commence Clinical Studies, including (a) an Investigational New Drug Application as defined in the FDCA or any successor application or procedure filed with the FDA (b) any equivalent of a United States IND in other countries or regulatory jurisdictions (*i.e.*, clinical trial application (CTA)), and (c) all supplements, amendments, variations, extensions and renewals thereof that may be filed with respect to the foregoing.

1.159 "**Indemnification Claim Notice**" has the meaning set forth in Section 10.3.

1.160 "**Indemnified Party**" has the meaning set forth in Section 10.3.

1.161 "**Indirect Taxes**" has the meaning set forth in Section 6.11.

1.162 "**Information**" means all knowledge of a technical, scientific, business and other nature, including technology, means, methods, processes, practices, formulae, instructions, skills, techniques, procedures, experiences, ideas, technical assistance, designs, drawings, assembly procedures, computer programs, apparatuses, specifications, data, results and other material, regulatory data, and other biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, pre-clinical, clinical, safety, manufacturing and quality control data and information, including study designs and protocols, and biological methodology; in each case (whether or not confidential, proprietary, patented or patentable, of commercial advantage or not) in written, electronic or any other form now known or hereafter developed.

1.163 "**Initial Program Slot**" means the first Program Slot for the Development and Manufacturing activities of Collaboration CAR-T Products and Licensed Products directed towards the Target Combination, as of the Effective Date, as set forth in Section B on attached Schedule 3.2.1 (the "**Initial Program Targets**").

1.164 "**Initial Research Plan**" has the meaning set forth in the definition of "Research Plan."

1.165 "**Initial Unavailable Targets**" has the meaning set forth in Section 3.2.4.

1.166 "**Initiation**" means, with respect to a Clinical Study, the first dosing of the first human subject in such Clinical Study.

1.167 "**Intellectual Property**" means Know-How and Patents.

1.168 "**Intellectual Property Rights**" has the meaning set forth in Section 11.5.1.

1.169 "**Internal Reserved Program**" means a *bona fide* internal program of Caribou directed to a Target that has been disclosed to the Gatekeeper and added to the list of Unavailable Targets[***] and [***].

1.170 "**JGC**" has the meaning set forth in Section 2.1.

1.171 "**Know-How**" means Information that is not generally known. Know-How specifically *excludes* issued Patents and published Patent applications.

1.172 "**Knowledge**" means, with respect to Caribou, the actual knowledge of [***], together with the knowledge any such individuals would reasonably be expected to have after performing a diligent investigation, including consultation with his or her direct reports. [***].

1.173 "**LIBOR**" means the London Interbank Offered Rate for deposits in Dollars having a maturity of one (1) month published by the British Bankers' Association, as adjusted from time to time on the first London business day of each month.

1.174 "**Licensed Product**" means: any product [***] for use in the Field comprising, containing, encoding, or expressing a Collaboration CAR-T Product, alone or in combination with one or more other active agents [***] in all forms, in current and future formulations, dosage forms and strengths, and delivery modes. [***]

1.175 "**Licenses**" has the meaning set forth in Section 5.1.1.

1.176 "**Life Sciences Entity**" means any pharmaceutical, biotechnology, medical device, or diagnostic company, including any Affiliate or any venture capital subsidiary or venture capital organization or division of a pharmaceutical, biotechnology, medical device, or diagnostic company.

1.177 "**Litigation Costs**" means all reasonable costs and expenses incurred by or on behalf of [***] in the defense of a Third Party Infringement Claim, and all damages, royalties, accounting, disgorgement, awards or other monetary payments resulting or arising from an adverse judgement against [***] or any settlement in connection with a Third Party Infringement Claim.

1.178 "**Losses**" has the meaning set forth in Section 10.1.

1.179 "**MAA**" has the meaning set forth in the definition of Drug Approval Application.

1.180 "**Major Market**" means each of the United States and each of the countries within the European Major Markets.

1.181 "**Manufacture**" and "**Manufacturing**" means all activities related to the synthesis, making, production, processing, filling, finishing, packaging, labeling, shipping, and holding of any Collaboration CAR-T Products or Licensed Products, or any intermediate thereof, or any reagent used in connection therewith, including process development, process qualification and validation, scale-up, pre-clinical, clinical and commercial production and analytic development, product characterization, stability testing, quality assurance, and quality control.

1.182 "**Markings**" has the meaning set forth in Section 4.8.

1.183 "**Materials**" means biological materials [***], chemical compounds, or other tangible materials, including reagents [***].

1.184 "**Mono Product**" has the meaning set forth in the definition of "Net Sales."

1.185 "**Net Sales**" means, with respect to a Licensed Product for any period, the total amount billed or invoiced on sales of such Licensed Product during such period by AbbVie and its Affiliates, or Sublicensees [***] (each, a "**Selling Party**") in the Territory to Third Parties (including wholesalers or Distributors), in *bona fide* arm's length transactions, less the following deductions, in each case related specifically to the Licensed Product and actually allowed and taken by such Third Parties and not otherwise recovered by or reimbursed to AbbVie or its Affiliates:

[***]

Subject to the above, Net Sales shall be calculated in accordance with the standard internal policies and procedures of AbbVie, its Affiliates, or Sublicensees, which must be in accordance with Accounting Standards.

For purposes of calculating Net Sales, all Net Sales shall be converted into Dollars.

In the event a Licensed Product is a Combination Product, the Net Sales for such Combination Product shall be calculated as follows:

(i) [***]

[***]

1.186 "**Neutral**" has the meaning set forth in attached Schedule 12.8.3.

1.187 "**Nominated Target**" has the meaning set forth in Section 3.2.6.

1.188 "**Non-Breaching Party**" has the meaning set forth in Section 11.2.1.

[***]

1.190 "**Out-of-Pocket Costs**" means costs and expenses paid to Third Parties (or payable to Third Parties and accrued in accordance with the Accounting Standards consistently applied) by Caribou (or its Affiliate) directly incurred in the conduct of any applicable activities under this Agreement; *provided* that Out-of-Pocket Costs shall not include costs for general overhead, postage, communications, photocopying, printing or internet expense, professional dues, operating supplies, laboratory supplies (*excluding* reagents), printers, photocopiers, fax machines or other office equipment.

1.191 "**Party**" and "**Parties**" has the meaning set forth in the preamble hereto.

1.192 "**Patent Challenge**" has the meaning given to such term in [***].

1.193 "**Patent Family**" means a group of Patents that share any priority relationship.

1.194 "**Patents**" means (a) all national, regional and international patents and patent applications, including provisional patent applications and rights to claim priority from any of these patents or applications, (b) all patent applications filed either from such patents, patent applications or provisional applications or from an application claiming priority from either of these, including divisionals, continuations, continuations-in-part, provisionals, converted provisionals and continued prosecution applications, (c) any and all patents that have issued or in the future issue from the foregoing patent applications ((a) and (b)), including utility models, petty patents and design patents and certificates of invention, (d) any and all extensions or restorations by existing or future extension or restoration mechanisms, including revalidations, reissues, re-examinations and extensions (including any patent term extensions, supplementary protection certificates, pediatric exclusivities, and the like) of the foregoing patents or patent applications ((a), (b), and (c)), and (e) any similar rights, including so-called pipeline protection or any importation, revalidation, confirmation or introduction patent or registration patent or patent of additions to any of such foregoing patent applications and patents.

1.195 "**Person**" means an individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture or other similar entity or organization, including a government or political subdivision, department, or agency of a government.

1.196 "**Personal Data**" means (a) all information identifying, or in combination with other information, identifiable to an individual, including pseudonymized (key-coded) Clinical Data containing such information; and (b) any other information that is governed, regulated, or protected by one or more Data Security and Privacy Laws.

1.197 "**Phase 0**" means an exploratory, first-in-human trial conducted in accordance with the FDA 2006 Guidance on Exploratory Investigational New Drug Studies (or the equivalent in any country or other jurisdiction outside of the United States) and designed to expedite the development of therapeutic or imaging agents by establishing very early on whether the agent behaves in human subjects as was anticipated from pre-clinical studies.

1.198 "**Phase I**" means a human clinical trial of a Collaboration CAR-T Product or Licensed Product, the principal purpose of which is a preliminary determination of safety, tolerability, pharmacological activity or pharmacokinetics in healthy individuals or patients or similar clinical study prescribed by the Regulatory Authorities, including the trials referred to in 21 C.F.R. § 312.21(a), as amended.

1.199 "**Phase II**" means a human clinical trial of a Collaboration CAR-T Product or Licensed Product, the principal purpose of which is a determination of safety and efficacy in the target patient population, which is prospectively designed to generate sufficient data that may permit commencement of pivotal clinical trials, or a similar clinical study prescribed by the Regulatory Authorities, from time to time, pursuant to Applicable Law or otherwise, including the trials referred to in 21 C.F.R. § 312.21(b), as amended.

1.200 "**Phase III**" means a human clinical trial of a Collaboration CAR-T Product or Licensed Product on a sufficient number of subjects in an indicated patient population that is designed to establish that a Collaboration CAR-T Product or Licensed Product is safe and efficacious for its intended use and to determine the benefit/risk relationship, warnings, precautions, and adverse reactions that are associated with such product in the dosage range to be prescribed, which trial is intended to support marketing approval of such Collaboration CAR-T Product or Licensed Product, including all tests and studies that are required by the FDA from time to time, pursuant to Applicable Law or otherwise, including the trials referred to in 21 C.F.R. § 312.21(c), as amended.

1.201 "**Phase IV Study**" means a post-marketing human clinical study for a Licensed Product with respect to any indication as to which all Regulatory Approvals have been received or for a use that is the subject of an investigator-initiated study program.

1.202 "**PHSA**" means the United States Public Health Service Act, as amended from time to time.

[***]

1.204 "**Platform Improvement IP**" has the meaning set forth in Section 5.6.4.

1.205 "**Platform Improvement IP In-License**" has the meaning set forth in Section 5.6.4.

1.206 "**Platform Technology IP Agreements**" has the meaning set forth in Section 9.2.5.

1.207 "**PMDA**" means Japan's Pharmaceuticals and Medical Devices Agency and any successor agency(ies) or authority having substantially the same function.

1.208 "**Potential In-License**" has the meaning set forth in Section 5.6.1.

1.209 "**Privacy and Security Obligations**" has the meaning set forth in Section 9.2.24.

1.210 "**Processing**" (or its conjugates) means any operation or set of operations that is performed upon Personal Data, whether or not by automatic means, such as collection, recording, organization, storage, adaptation or alternation, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, blocking, erasure or destruction.

1.211 "**Product Information**" has the meaning set forth in Section 8.1.

1.212 "**Product Infringement**" has the meaning set forth in Section 7.3.1.

1.213 "**Product Labeling**" means, with respect to a Licensed Product in a country or other jurisdiction in the Territory, (a) the Regulatory Authority-approved full prescribing information for such Licensed Product for such country or other jurisdiction, including any required patient information, and (b) all labels and other written, printed, or graphic matter upon a container, wrapper, or any package insert utilized with or for such Licensed Product in such country or other jurisdiction.

1.214 "**Product-Specific In-Licenses**" has the meaning set forth in Section 5.6.2.

1.215 "**Product-Specific IP**" has the meaning set forth in Section 5.6.2.

1.216 "**Product Trademarks**" means the Trademark(s) to be used by AbbVie or its Affiliates or its or their respective Sublicensees for the Development or Commercialization of Collaboration CAR-T Products or Licensed Products in the Territory and any registrations thereof or any pending applications relating thereto in the Territory (*excluding*, in any event, any trademarks, service marks, names or logos that include any corporate name or logo of the Parties or their Affiliates).

[***] "**Program Confidential Information**" has the meaning given to such term [***]

1.218 "**Program Materials**" has the meaning given to such term [***].

1.219 "**Program Slot**" means a program under this Agreement for the Development and Manufacturing activities of Collaboration CAR-T Products and Licensed Products directed to defined Target(s) pursuant to a Research Plan. [***]

1.220 "**Program Slot Exercise Date**" has the meaning set forth in Section 3.2.7.

1.221 "**Program Slot Selection Notice**" has the meaning set forth in Section 3.2.7.

[***]

1.223 "**Proposed Target**" has the meaning set forth in Section 3.2.5.

1.224 "**Provided Materials**" means any Materials provided by one Party (or its Affiliates) to the other Party (or its Affiliates) to conduct activities pursuant to this Agreement.

1.225 "**Qualified Financing**" has the meaning set forth in Section 6.2.

1.226 "**Registrational Trial**" means, with respect to any Collaboration CAR-T Product or Licensed Product, (a) a Phase III or (b) any other Clinical Study on a sufficient number of patients, the results of which, together with prior data and information concerning such product, are intended to be, at the time of initiation, without any additional Clinical Studies, sufficient to meet the evidentiary standard for demonstrating the safety, purity, efficacy, and potency of such Collaboration CAR-T Product or Licensed Product is safe and effective for its intended use in the Territory to support Regulatory Approval of such Collaboration CAR-T Product or Licensed Product in the Territory for its intended use.

1.227 "**Regulatory Approval**" means, with respect to a country or other jurisdiction in the Territory, the approvals (including Drug Approval Applications), licenses, registrations, or authorizations of any Regulatory Authority necessary to Commercialize a Collaboration CAR-T Product or Licensed Product in such country or other jurisdiction, including, where applicable, (a) pricing or reimbursement approval in such country or other jurisdiction, (b) pre- and post-approval marketing authorizations (including any prerequisite Manufacturing approval or authorization related thereto), and (c) approval of Product Labeling.

1.228 "**Regulatory Authority**" means any applicable supra-national, federal, national, regional, state, provincial, or local governmental or regulatory authority, agency, department, bureau, commission, council, or other entities (*e.g.*, the FDA, EMA and PMDA) regulating or otherwise exercising authority with respect to activities contemplated in this Agreement, including the Exploitation of the Collaboration CAR-T Products or Licensed Products in the Territory.

1.229 "**Regulatory Documentation**" means all (a) applications (including all INDs and Drug Approval Applications and other major Regulatory Filings), registrations, licenses, authorizations, and approvals (including Regulatory Approvals), (b) correspondence and reports submitted to or received from Regulatory Authorities (including minutes and official contact reports relating to any communications with any Regulatory Authority) and all supporting documents with respect thereto, including all regulatory drug lists, advertising and promotion documents, adverse event files, and complaint files, and (c) Clinical Data and data contained or relied upon in any of the foregoing, in each case ((a), (b), and (c)) relating to a Collaboration CAR-T Product or Licensed Product.

1.230 "**Regulatory Exclusivity**" means, in connection with a Licensed Product, and with respect to any country or other jurisdiction in the Territory, an additional market protection, other than Patent or Patent-related protection, granted by a Regulatory Authority in such country or other jurisdiction which confers an exclusive Commercialization period during which AbbVie or its Affiliates have the exclusive right to market and sell, and any other Third Party is prevented from marketing or selling, such Licensed Product in such country or other jurisdiction.

1.231 "**Regulatory Filing**" means all (a) applications (including all INDs and Regulatory Approval applications), registrations, licenses, authorizations, and approvals (including Regulatory Approvals), (b) correspondence and reports submitted to or received from Regulatory Authorities (including minutes and official contact reports relating to any communications with any Regulatory Authority) and all supporting documents with respect thereto, including all regulatory drug lists, advertising and promotion documents, adverse event files, and complaint files, and (c) Clinical Data and data contained or relied upon in any of the foregoing, in each case ((a), (b), and (c)) relating to a Collaboration CAR-T Product or Licensed Product.

1.232 "**Research Collaboration Term**" means, on a Program Slot-by-Program Slot basis, the period beginning on the Effective Date and ending [***].

1.233 "**Research Costs**" means the FTE Costs and the Out-of-Pocket Costs incurred by or on behalf of Caribou or any of its Affiliates in accordance with the Accounting Standards and this Agreement, that are specifically attributable to the performance of the Development activities under the applicable Research Plan.

1.234 "**Research Plan**" means each research and discovery plan and budget to be implemented by the Parties for a Program Slot. The initial Research Plan for the Initial Program Slot is set forth in Section A of attached Schedule 3.2.1 (the "**Initial Research Plan**") with additional Research Plan(s) to be agreed upon by the JGC during the Research Collaboration Term and subsequently included in Schedules to be appended to this Agreement.

1.235 "**Reserved Targets**" means the Targets which Caribou has reserved for AbbVie's exclusive use hereunder and which are listed on attached Schedule 3.2.2, as such Schedule may be updated from time to time in accordance with Section 3.2.2.

[***]

1.237 "**Royalty Term**" means, on a Licensed Product-by-Licensed Product and country-by-country basis, the period of time beginning on the First Commercial Sale of a Licensed Product in a country and ending on the latest of (a) the expiration, invalidation, revocation, cancellation, or abandonment date of the last Caribou Patent that includes a Valid Claim that claims (i) the Collaboration CAR-T Product in such Licensed Product, or (ii) the method of making the Collaboration CAR-T Product in such Licensed Product which method is used in the Manufacture of such Licensed Product for commercial sales (in the case of (ii), only for so long as no Biosimilar Product is commercially available in such country), in such country [***]; (b) ten (10) years from First Commercial Sale of such Licensed Product in such country; and (c) expiration of Regulatory Exclusivity for such Licensed Product in such country.

1.238 "**Securities Exchange Act**" means United States Securities Exchange Act of 1934, as amended.

1.239 "**Sell-Off Period**" has the meaning set forth in Section 11.10.2.

1.240 "**Selling Party**" has the meaning set forth in the definition of "Net Sales."

1.241 "**Senior Officer**" means, with respect to Caribou, [***], and with respect to AbbVie, [***].

[***]

1.243 "**Specified Value**" has the meaning set forth in Section 3.2.9

1.244 "**Step-In Activities**" has the meaning set forth in Section 3.7.1.

1.245 "**Subcommittee**" has the meaning set forth in Section 2.2.5.

1.246 "**Sublicensee**" means a Person, other than an Affiliate or a Distributor, that is granted a sublicense by AbbVie under the grants in Section 5.1 as provided in Section 5.3.

1.247 "**Substitute Target**" has the meaning set forth in Section 3.2.8.

1.248 "**Substitution**" has the meaning set forth in Section 3.2.8.

1.249 "**Supplemental Existing Services Agreement Document**" has the meaning set forth in Section 3.9.2.

1.250 "**Target**" means a protein identified by its UniProt# or gene name, including ones selected and Developed as set forth in a Research Plan, including all splicing and allelic variants thereof.

1.251 "**Target Acceptance Date**" has the meaning set forth in Section 3.2.6.

1.252 "**Target Availability Notice**" has the meaning set forth in Section 3.2.6.

[***]

1.254 "**Target Combination**" means [***] different Targets selected by AbbVie for a Program Slot.

1.255 "**Target Nomination Notice**" has the meaning set forth in Section 3.2.6.

1.256 "**Target-Specific In-Licenses**" has the meaning set forth in Section 5.6.2.

1.257 "**Target-Specific IP**" has the meaning set forth in Section 5.6.2.

1.258 "**Target Substitution Period**" means, on a Program Slot-by-Program Slot basis, the period beginning on the Effective Date and ending on the [***].

1.259 "**Term**" has the meaning set forth in Section 11.1.

1.260 "**Terminated Territory**" means each Major Market with respect to which this Agreement is terminated by Caribou pursuant to Section 11.2.2, each country or jurisdiction with respect to which this Agreement is terminated by AbbVie pursuant to Section 11.3.2, or, if this Agreement is terminated in its entirety, the entire Territory.

1.261 "**Territory**" means worldwide.

1.262 "**Third Party**" means any Person other than Caribou, AbbVie, and their respective Affiliates.

1.263 "**Third Party Claims**" has the meaning set forth in Section 10.1.

1.264 "**Third Party Infringement Claim**" has the meaning set forth in Section 7.4.1.

1.265 "**Top-Tier Venture Capital Investor**" means a leading reputable venture capital or crossover investor with such knowledge and experience in financial and business affairs that it is capable of evaluating the merits and risks of purchasing, and other considerations relating to, investments in biotechnology companies, can afford to bear the economic risk of holding multiple significant investments and routinely makes such investments in the ordinary course.

1.266 "**Trademark**" means any word, name, symbol, color, designation or device or any combination thereof that functions as a source identifier, including any trademark, trade dress, brand mark, service mark, trade name, brand name, logo, business symbol or domain names, whether or not registered, and any application therefor.

1.267 "**Transfer Date**" means, on a Collaboration CAR-T Product-by-Collaboration CAR-T Product basis[***].

1.268 "**Transition Plan**" has the meaning set forth in Section 4.2.

1.269 "**Unavailable Targets**" has the meaning set forth in Section 3.2.3.

1.270 "**United States**" means the United States of America and its territories and possessions (including the District of Columbia and Puerto Rico).

1.271 "**Upstream Payment Obligations**" has the meaning set forth in Section 5.6.4.

1.272 "**Valid Claim**" means a claim of any issued and unexpired Patent whose validity, enforceability, or patentability has not been affected by any of the following: (a) irretrievable lapse, abandonment, revocation, cancellation, dedication to the public, or disclaimer; or (b) a holding, finding, or decision of invalidity, unenforceability, or non-patentability by a court, governmental agency, national or regional patent office, or other appropriate body that has competent jurisdiction, such holding, finding, or decision being final and unappealable or unappealed within the time allowed for appeal. [***]

1.273 "**Voting Stock**" has the meaning set forth in the definition of "Change in Control."

[***]

1.276 "**Withholding Amount**" has the meaning set forth in Section 6.10.

1.277 "**Withholding Party**" has the meaning set forth in Section 6.10.

1.278 "**Working Group**" has the meaning set forth in Section 2.9.

ARTICLE 2
MANAGEMENT OF THE COLLABORATION

2.1 Joint Governance Committee. Within [***] days after the Effective Date, the Parties shall establish a joint governance committee (the "**JGC**") to serve as the oversight and decision making body for the activities to be conducted by the Parties pursuant to the Research Plans, as more fully described in this ARTICLE 2. The JGC shall consist of [***] representatives from each Party, each of whom shall be an employee of such Party and shall have the requisite experience and seniority to enable such person to make decisions on behalf of the Parties with respect to the issues falling within the jurisdiction of the JGC. From time to time, each Party may substitute [***] or more of its employee representatives to the JGC on prior written notice to the other Party. The JGC chairperson will alternate between a JGC member of AbbVie and a JGC member of Caribou on an annual basis, with AbbVie having the right to select an AbbVie employee representative as the JGC chairperson until the end of the first full Calendar Year after the Effective Date. From time to time, the Party appointing the chairperson for the JGC may change the employee representative who will serve as chairperson on prior written notice to the other Party.

2.2 Specific Responsibilities. The JGC shall perform the following functions, subject to the final decision making authority of the respective Parties as set forth in Section 2.5:

[***]

2.2.8 [***]

2.3 Meetings and Minutes. Each Committee shall meet quarterly, or as otherwise agreed to by the Parties, with the location of such meetings alternating between locations designated by Caribou and locations designated by AbbVie, such meetings to include the use of virtual meetings, as appropriate. The chairperson of the Committee shall be responsible for calling meetings on no less than [***] Business Days' notice. Each Party shall make all proposals for agenda items and shall provide all appropriate information with respect to such proposed items at least [***] Business Days in advance of the applicable meeting; *provided* that, under exigent circumstances requiring input by a Committee, a Party may provide its agenda items to the other Party within a shorter period of time in advance of the meeting, or may propose that there not be a specific agenda for a particular meeting, so long as the other Party consents to such later addition of such agenda items or the absence of a specific agenda for such meeting, such consent not to be unreasonably withheld, conditioned or delayed. Following each meeting, the Alliance Managers shall ensure meeting minutes are prepared and shall circulate an initial draft thereof to Committee members for review and comment. Alliance Managers shall ensure that the minutes of each meeting of such Committee are reviewed and approved promptly, but in no event later than the next meeting of the relevant Committee.

2.4 Procedural Rules. The JGC shall have the right to adopt such standing rules as shall be necessary for its work and the work of each Subcommittee, to the extent that such rules are not inconsistent with this

Agreement. A quorum of a Committee shall exist whenever there is present at a meeting at least two (2) representatives appointed by each Party. Representatives of the Parties on a Committee may attend a meeting either in person or by telephone, video conference or similar means in which each participant can hear what is said by, and be heard by, the other participants. Representation by proxy shall be allowed, including by an Alliance Manager. Each Committee shall take action by consensus of the representatives present at a meeting at which a quorum exists, with each Party having a single vote irrespective of the number of representatives of such Party in attendance, or by a written resolution signed by at least one (1) representative appointed by each Party. Employees or consultants of either Party who are not representatives of the Parties on a Committee may attend meetings of such Committee; *provided* that such attendees (a) shall not vote in the decision-making process of the Committee, and (b) are bound by obligations of confidentiality and non-disclosure equivalent to those set forth in this Agreement.

2.5 Decision-Making.

2.5.1 Escalation to JGC. Except as otherwise provided herein, all decisions of the JGC and of each Subcommittee and each Working Group shall be made by consensus, with all of a Party's voting members collectively having one (1) vote. Decisions of the JGC and each Subcommittee and Working Group shall be made by unanimous vote. If a Subcommittee or Working Group is incapable of reaching unanimous agreement on a matter before it within [***] Business Days (or such other time period as mutually agreed by the Parties), the matter shall be referred to the JGC for resolution. If the JGC is incapable of reaching unanimous agreement on a matter before it within [***] Business Days (or such other time period as mutually agreed by the Parties), the matter shall be resolved in accordance with Section 2.5.2.

2.5.2 Escalation to the Parties; Limitations on Authority. If the JGC cannot agree on a matter within [***] Business Days (or such other time period as mutually agreed by the Parties) after it has met and attempted to reach such decision, then the matter shall be finally and definitively resolved by AbbVie. Notwithstanding the foregoing, in no event shall the JGC, any Subcommittee, any Working Group, the Alliance Managers, or any Party alone have the power or authority to: (a) amend this Agreement, (b) amend an existing Research Plan in a manner that would result in (i) a reduction in the budget in a Research Plan for any Development and/or Manufacturing activities to be performed by Caribou without a commensurate reduction in the nature or scope of such Development and/or Manufacturing activities, or (ii) an increase in the nature or scope of Development and/or Manufacture activities to be performed by Caribou without a commensurate increase in the budget in the applicable Research Plan(s), (c) determine that a Party has fulfilled its obligations under this Agreement or that the other Party has breached this Agreement, (d) impose any requirements on either Party to forgo any of its rights under this Agreement, (e) make a decision that is expressly stated to require the mutual agreement of the Parties or approval of the other Party, or (f) require either Party to perform any act that it reasonably believes to be inconsistent with any Applicable Law. Any decision made by AbbVie in accordance with this Section 2.5.2 shall be considered a decision made by the JGC.

2.6 Alliance Managers. Promptly after the formation of the JGC, each Party shall appoint an employee (who may not be a then-current member of the JGC) to act as alliance manager for such Party (each, an "**Alliance Manager**"). Each Alliance Manager shall thereafter be permitted to attend meetings of the JGC as a nonvoting attendee. The Alliance Managers shall be the primary point of contact for the Parties regarding the activities contemplated by this Agreement. The Alliance Managers shall also be responsible for assisting the JGC in performing its oversight responsibilities. The name and contact information for each Party's Alliance Manager, as well as any replacement chosen by such Party, in its sole discretion, from time to time, shall be promptly provided to the other Party. Any disagreement between the Alliance Managers of AbbVie and Caribou shall be referred to the JGC for resolution.

2.7 Discontinuation of Committees. On a Program Slot-by-Program Slot basis, the JGC, each Subcommittee, and each Working Group shall have no further oversight or authority over a Program Slot upon the conclusion of the applicable Research Collaboration Term for such Program Slot. Unless otherwise agreed by the Parties, the JGC, each Subcommittee, and each Working Group shall be automatically disbanded and the Alliance Manager roles shall be automatically terminated upon the end of the last-to-expire Research Collaboration Term. Additionally, in the event of a Change in Control of Caribou, AbbVie shall have the right to disband the JGC pursuant to Section 12.2.

2.8 Interactions Between a Committee and Internal Teams. The Parties recognize that each Party possesses an internal structure (including various committees, teams, and review boards) that will be involved in

administering such Party's activities under this Agreement. Nothing contained in this ARTICLE 2 shall prevent a Party from making routine day-to-day decisions relating to the conduct of those activities for which it has a performance or other obligations hereunder, in each case in a manner consistent with the then-current applicable plan and the terms and conditions of this Agreement.

2.9 Working Groups. From time to time, a Committee may establish and delegate duties to sub-committees or directed teams (each, a "**Working Group**") on an "as-needed" basis to oversee particular projects or activities (for example, joint project team, joint finance group, and/or joint intellectual property group). Each such Working Group shall be constituted and shall operate as the relevant Committee determines; provided, that each Working Group shall have equal representation from each Party, unless otherwise mutually agreed. Working Groups may be established on an *ad hoc* basis for purposes of a specific project or on such other basis as a Committee may determine. Each Working Group and its activities shall be subject to the oversight, review, and approval of, and shall report to, the Committee that formed such Working Group. In no event shall the authority of the Working Group exceed that specified for the Committee that formed the Working Group. All decisions of a Working Group shall be by consensus. Any disagreement between the designees of AbbVie and Caribou on a Working Group shall be referred to the JGC for resolution.

2.10 Expenses. Each Party shall be responsible for all travel and related costs and expenses for its members and other representatives to attend meetings of, and otherwise participate on, a Committee or Working Group.

2.11 Authority. Each Party will retain the rights, powers and discretion granted to it under this Agreement and no such rights, powers or discretion will be delegated to or vested in the JGC or any Subcommittee or any Working Group unless such delegation or vesting of rights is expressly provided for in this Agreement or the Parties expressly so agree in writing.

ARTICLE 3
RESEARCH COLLABORATION

3.1 Research Collaboration Overview.

3.1.1 Caribou Platform Technology. AbbVie and Caribou will collaborate to use the Caribou Platform Technology to identify, Develop and Manufacture Collaboration CAR-T Products and Licensed Products. As of the Effective Date, AbbVie has the right to select two (2) Program Slots under this Agreement; thereafter, during the Additional Program Slot Period, AbbVie may, in its discretion, select up to two (2) additional Program Slots under this Agreement, for a total not to exceed four (4) Program Slots. [***] pursuant to the terms of the applicable Research Plan, as set forth and subject to the terms of this ARTICLE 3.

[***]

3.2 Program Slots; Research Plans.

3.2.1 Program Slots.

(a) *Initial Program Slot*. Section A of attached Schedule 3.2.1 sets forth the Initial Research Plan. As of the Effective Date, AbbVie has selected the Target Combination for the Initial Program Slot as set forth in the Initial Research Plan and in Section B of attached Schedule 3.2.1.

(b) *Second Program Slot*. At any time during the two (2) year period following the Effective Date, AbbVie shall have the right to select a Target or Target Combination for the second Program Slot [***].

(c) *Two Additional Program Slots*. AbbVie shall have the right at any time during the Additional Program Slot Period to add up to two (2) additional Program Slots in its sole discretion. For each such additional Program Slot beyond the first two (2) Program Slots, AbbVie will pay to Caribou an Additional Program Slot Fee pursuant to Section 6.3. [***]

3.2.2 Reserved Targets. The Parties agree that:

(a) Attached Schedule 3.2.2 sets forth a list of six (6) Targets reserved for AbbVie on an exclusive basis to select, at AbbVie's sole discretion, as a Target for the second (2nd), third (3rd), or fourth (4th) Program Slots (or as a Substitute Target) (each a "**Reserved Target**"). The list of Reserved Targets shall not exceed six (6) Targets at any time;

(b) The list of Reserved Targets shall be [***] if, prior to expiration of the Additional Program Slot Period, AbbVie elects [***];

(c) The list of Reserved Targets shall be reduced to [***] if, prior to expiration of the Additional Program Slot Period, AbbVie elects [***]; and

(d) At any time, AbbVie may replace, at AbbVie's sole discretion, any Reserved Target *provided* that, (i) such replacement shall not occur more than once per Calendar Year and (ii) such replacement shall follow the nomination process in Section 3.2.6, *mutatis mutandis*, and the Target Nomination Notice shall identify the to-be-replaced Reserved Target(s).

3.2.3 Gatekeeper. Within [***] days after the Effective Date, Caribou shall engage an independent Third Party mutually agreeable to the Parties (the "**Gatekeeper**") for the purposes of performing the applicable functions set forth in Sections 3.2.4, 3.2.5, and 3.2.6, including (a) maintaining, in accordance with Section 3.2.4, a list of Targets that are not available for nomination by AbbVie under this Agreement ("**Unavailable Targets**") and (b) confirming whether Proposed Targets and Nominated Targets are on the list of Unavailable Targets. [***] Such engagement shall be on terms consistent with this Agreement and mutually agreeable to the Parties, including provisions relating to confidentiality. The identity of the Unavailable Targets is deemed to be the Confidential Information of Caribou and the identity of the Reserved Targets, Proposed Targets, and Nominated Targets is deemed to be the Confidential Information of AbbVie.

3.2.4 Unavailable Targets. Caribou and the Gatekeeper shall maintain an up-to-date list of Unavailable Targets in accordance with the following:

(a) Caribou has identified an initial list of four (4) Unavailable Targets, which list is attached hereto as Schedule 3.2.4 (the "**Initial Unavailable Targets**"). [***]

(b) Notwithstanding anything to the contrary herein, the list of Unavailable Targets shall in no event include any Reserved Target at any time;

(c) The list of Unavailable Targets shall be limited to (i) subject to Section 3.2.4(a), the Initial Unavailable Targets, (ii) Targets under an effective, executed written agreement (A) with a Third Party with respect to a license or collaboration regarding T cells or other immune cells producing a CAR protein directed against such Targets and (B) that would preclude Caribou from granting a license to AbbVie under this Agreement, and (iii) Targets that are the subject of an Internal Reserved Program. [***] and

(d) Caribou shall notify the Gatekeeper within [***] days, (i) after any Target becomes an Unavailable Target in accordance with Section 3.2.4(c)(ii) and/or Section 3.2.4(c)(iii) and (ii) after any Target on the list of Unavailable Targets no longer meets the criteria set forth in Section 3.2.4(a), Section 3.2.4(c)(ii) and/or Section 3.2.4(c)(iii) (including termination of an agreement with a Third Party or termination of an Internal Reserved Program) and is therefore no longer an Unavailable Target. Upon receipt of such notification, the Gatekeeper shall update the list of Unavailable Targets accordingly.

3.2.5 Proposed Targets. Prior to nomination of a Target (whether pursuant to Section 3.2.6 or Section 3.2.8), AbbVie may, in its discretion, disclose a Target it is considering for potential nomination (a "**Proposed Target**") to the Gatekeeper and request in writing that the Gatekeeper confirm if the Proposed Target is on the list of Unavailable Targets. Within [***] Business Days following the Gatekeeper's receipt of the identity of a Proposed Target from AbbVie, the Gatekeeper shall verify whether such Proposed Target is on the list of Unavailable Targets and notify AbbVie in writing whether such Proposed Target is or is not on the list of Unavailable Targets. Notwithstanding anything herein to the contrary (a) AbbVie shall have no obligation to nominate any Proposed Targets, and (b) in no way shall a request by AbbVie with respect to a Proposed Target under this Section 3.2.5 be deemed to be a nomination of the Target as an Accepted Target (and such Target shall not be considered nominated unless and until it is formally nominated in accordance with the terms and conditions set forth in Section 3.2.6).

3.2.6 Nominated Targets. To nominate a Target as an Accepted Target, AbbVie shall provide the Gatekeeper with a confidential written description of the Target (the "**Nominated Target**") including, to the extent available, the NCBI Entrez Gene Symbol, the NCBI RefSeq accession number and the gene sequence for such Target (the "**Target Nomination Notice**"). Within [***] Business Days following the Gatekeeper's receipt of the Target Nomination Notice with respect to a Nominated Target, the Gatekeeper shall verify whether such Nominated Target is on the list of Unavailable Targets and notify AbbVie in writing ("**Target Availability Notice**") whether such Nominated Target is or is not on the list of Unavailable Targets. If the Target Availability Notice indicates that the Nominated Target is not on the list of Unavailable Targets, then such Nominated Target shall automatically be designated as an "**Accepted Target**" on the date of AbbVie's receipt of the Target Availability Notice (the "**Target Acceptance Date**"), and the Parties will have all rights and obligations hereunder in connection with such Accepted Target or new Reserved Target (including exclusivity in accordance with Section 5.9) as of the Target Acceptance Date. If the Target Availability Notice indicates that the Nominated Target is on the list of Unavailable Targets, then (a) if such Nominated Target is subsequently removed from the list of Unavailable Targets, the Gatekeeper shall provide written notice to AbbVie within [***] Business Days of such Nominated Target's removal therefrom and (b) AbbVie shall have the right to nominate an alternative Nominated Target (or the same Nominated Target, if it becomes available) in accordance with this Section 3.2.6. In the event that one or more Third Parties has requested the same Unavailable Target and such Nominated Target is subsequently removed from the list of Unavailable Targets, the Gatekeeper will use reasonable best efforts to send written notice of the availability of such Nominated Target to AbbVie and any such Third Party(ies) at the same time. In all cases, Caribou acknowledges and agrees that if AbbVie is the first Person to submit a Target Nomination Notice for a Nominated Target, then unless such Nominated Target is subject to an Internal Reserved Program, such Nominated Target will, subject to the terms of this Agreement, be deemed an Accepted Target.

3.2.7 Additional Program Slots.

(a) *Target Selection*. For each Program Slot other than the Initial Program Slot, AbbVie shall select such Program Slot by providing written notice to Caribou thereof at any time during the applicable time window as set forth in Sections 3.2.1(b) and 3.2.1(c), which notice shall (i) identify any Reserved Target(s) that will be the subject of such Program Slot, and/or (ii) notify Caribou of the initiation of the Target nomination process in Section 3.2.6 (each such notice, the "**Program Slot Selection Notice**"). [***]

(b) *Additional Research Plans*. If none of the Targets proposed by AbbVie in a Program Slot Selection Notice corresponds to Unavailable Target(s), the JGC will promptly agree on a Research Plan for the applicable Program Slot, but in no event less than [***] days following the date of the Program Slot Selection Notice. Upon the JGC's approval of each such plan, such plan will be deemed to be a "Research Plan" under this Agreement and AbbVie will be deemed to have selected the applicable Program Slot under this Agreement as of the date on which the JGC approves such Research Plan (the "**Program Slot Exercise Date**").

3.2.8 Program Target Substitution. On a Program Slot-by-Program Slot basis during the applicable Target Substitution Period, AbbVie shall have the one-time right, in its sole discretion, to select a substitute Target or Target Combination (a "**Substitute Target**" or "**Substitute Targets**," as applicable, and a "**Substitution**") for each applicable Program Slot, such Target(s) to be selected from either the Reserved Target list or other available Targets, subject to the selection procedures of Section 3.2.7(a) (Target Selection). Upon a Substitution, the JGC shall promptly agree on a Research Plan for the Program Slot for such Substitute Targets. Upon the JGC's approval of such plan, such plan will be deemed a "Research Plan" under this Agreement and AbbVie will be deemed to have selected the applicable Substitute Target for such Program Slot under this Agreement as of the date on which the JGC approves such Research Plan. [***]

3.2.9 Consideration Reimbursement. In the event that, following the Effective Date, Caribou acquires or in-licenses from any Third Party a [***] in respect of any Target which is not an Accepted Target, Reserved Target or Substitute Target, and through nomination by AbbVie (whether pursuant to Section 3.2.6 or Section 3.2.8) such Target becomes an Accepted Target or Substitute Target prior to such Target becoming the subject of an Internal Reserved Program [***].

3.3 Conduct of Research Plan.

3.3.1 Generally. Caribou shall conduct its activities under the applicable Research Plan in accordance with this ARTICLE 3 and the other terms and conditions of this Agreement. Under the direction and supervision of the JGC, Caribou shall perform all of its Development activities set forth in the applicable Research Plan in good scientific manner and in compliance with all Applicable Law, including all applicable GMP requirements, GLP requirements and good clinical practice requirements. [***]

3.3.2 Diligence. Pursuant to a Research Plan, following [***] Caribou shall complete the tasks set forth in the applicable Research Plan and shall use Commercially Reasonable Efforts to achieve the objectives of the applicable Research Plan as soon as reasonably practicable and in accordance with the timeline set forth in the applicable Research Plan. Without limiting the foregoing, Caribou shall allocate sufficient time, effort, equipment, and skilled personnel to perform such Development activities successfully and in accordance with the applicable Research Plan and its obligations under this Agreement.

3.3.3 Amendments to Research Plans. Either Party may propose an amendment to a Research Plan by submitting such proposed amendment in writing to the JGC for review and approval. Upon the approval of the JGC, the applicable Research Plan shall be deemed to be amended by such amendment. Notwithstanding the foregoing or anything to the contrary in this Agreement, the JGC will not have the authority to approve any amendment to a Research Plan that would result in [***], which amendment will require the mutual written agreement of the Parties.

3.3.4 Research Plan Records. Caribou shall, and shall require its Affiliates and Third Party Providers to, maintain complete, current and accurate hard and/or electronic (as applicable) copies of records of all work conducted pursuant to its Development and Manufacturing activities under a Research Plan, and all results, data, developments and Collaboration Know-How made in conducting such activities. Such records shall accurately reflect all such work done and results achieved with respect to a Research Plan in sufficient detail to verify compliance with Caribou's obligations under this Agreement and shall be in good scientific manner appropriate for applicable patent and regulatory purposes and comply with Applicable Law. Such records shall record only such activities performed pursuant to this Agreement and shall not include or be commingled with records of activities outside the scope of the Research Plans. Such records shall be retained by Caribou for at least [***] years after the expiration or termination of this Agreement, or for such longer period as may be required by Applicable Law. AbbVie shall have the right, during normal business hours, and upon reasonable, and no less than [***] calendar days, prior written notice, to inspect and copy all records maintained pursuant to this Section 3.3.4.

3.4 Caribou Optional and Opt In Technology.

[***]

3.5 Research Reports. During the applicable Research Collaboration Term, [***] in advance of each Calendar Quarter meeting of the JGC, Caribou shall provide to AbbVie (a) a reasonably detailed, written progress report on the status of its activities under the applicable Program Slot, (b) a reasonably detailed summary of all data with respect to the applicable Collaboration CAR-T Products resulting from Caribou's activities under the applicable Program Slot, and (c) access to or copies of written reports of applicable Development activities under the Program Slot as may be prepared by Caribou. Notwithstanding the foregoing, Caribou shall, within a reasonably prompt period of time following a request by AbbVie, provide to AbbVie such additional Information relating to each applicable Program Slot as may be

reasonably requested by AbbVie to enable AbbVie to assess Caribou's progress under and compliance with the applicable Research Plan. For clarity, research reports submitted by Caribou under this Section 3.5 may be in PowerPoint format, *provided* such PowerPoints contain all information specified in the foregoing clauses (a) and (b).

3.6 Data Packages. On a Program Slot-by-Program Slot basis, within [***] days after [***] (or such other period of time mutually agreed by the Parties), Caribou shall deliver to AbbVie the complete Data Package with respect to the applicable Program Slot.

[***]

3.8 Research Costs. Caribou shall use Commercially Reasonable Efforts to ensure that the Research Costs are within the applicable Research Plan budget. Subject to this Section 3.8, AbbVie shall reimburse Caribou for the Research Costs actually incurred by Caribou after the Effective Date in connection with the performance of Development activities in accordance with the applicable Research Plan and budget set forth therein. Caribou shall calculate and maintain records of FTE Costs (on an employee percentage allocation basis) and Out-of-Pocket Costs with respect to each Research Plan incurred by it, unless agreed by the Parties in writing. AbbVie shall have no obligation to reimburse any Research Costs or other costs of Development incurred by Caribou except as expressly set forth in Section 3.4.1(d), Section 3.7, this Section 3.8, Section 3.9.2, Section 3.9.3, as applicable, and Section 3.10.3.

3.8.1 Budget Overages.

(a) In the event Caribou determines that it is likely to incur Research Costs in excess of the applicable Research Plan budget for a Calendar Year, Caribou shall inform AbbVie of the expected overage within [***] Business Days of making such determination. Prior to incurring any Research Costs in excess of the applicable Research Plan budget, Caribou shall provide to the JGC a reasonably detailed written explanation of such additional Research Costs. Any overspend of Caribou in excess of [***] of the then-current applicable Research Plan budget shall be borne by Caribou, [***].

(b) Any overspend, or potential overspend, by Caribou of the Research Costs set forth in the applicable Research Plan shall not impact Caribou's obligations under Section 3.6. Without limiting the foregoing, for so long as Caribou is performing activities under the applicable Research Plan, within [***] days after the end of the [***] of each Calendar Year, Caribou shall provide to AbbVie (i) an estimate of the FTE Costs and Out-of-Pockets Costs anticipated to be incurred by Caribou during the [***] of such Calendar Year and (ii) a good faith estimate of the FTE Costs and Out-of-Pockets Costs anticipated to be incurred by Caribou for the following Calendar Year.

3.8.2 Research Cost Payments. On a Research Plan-by-Research Plan basis, within [***] days after the end of each Calendar Quarter in which Caribou is performing any Development activities under the applicable Research Plan, Caribou shall provide to AbbVie an invoice setting forth the Research Costs incurred by or on behalf of Caribou during such Calendar Quarter, along with a summary report of such Research Costs, which report shall (a) specify in reasonable detail all amounts included in the Research Costs during such Calendar Quarter, (b) set forth any payment (or series of payments) to a Third Party that exceeds [***] and (c) include copies of any invoice(s) or other supporting documentation with respect to payment (or series of payments) to a Third Party that exceeds [***]. Caribou also shall provide, on AbbVie's request, copies of any other invoices or other supporting documentation for any payment made to a Third Party. AbbVie shall reimburse Caribou for all undisputed Research Costs set forth in the applicable invoice within [***] calendar days of AbbVie's receipt thereof, *provided*, that if AbbVie disputes in good faith any portion of such invoice, it shall pay the undisputed Research Costs and shall provide Caribou with written notice of the disputed portion and its reasons therefor within [***] calendar days of receipt of such invoice, and AbbVie shall not be obligated to pay such disputed portion unless and until such dispute is resolved in favor of Caribou. The Parties shall use good faith efforts to resolve any such disputes promptly. If it is determined that AbbVie disputed any amounts invoiced by Caribou in bad faith, AbbVie shall promptly make payment to Caribou of all such amounts, together with interest thereon, pursuant to Section 6.9.

3.9 Third Party Providers.

3.9.1 Caribou shall have the right to subcontract any of its Development and Manufacturing activities set forth in the applicable Research Plan, to a Third Party (a "**Third Party Provider**") [***] Except as provided in Section 4.4.2, Caribou further shall use Commercially Reasonable Efforts to assist AbbVie in obtaining from such Third Party Provider any Manufacturing Process or related technology used in the Manufacture of such Collaboration CAR-T Products or Licensed Products, including all Know-How and Materials related thereto.

3.9.2 In the event that (a) a Third Party Provider is an existing Caribou service provider (each an "**Existing Third Party Provider**") under an existing services agreement (*e.g.*, a master services agreement) (each an "**Existing Services Agreement**"), and the Existing Third Party Provider will only provide non-GLP, non-GMP activities pursuant to a Research Plan, then, in lieu of a new services agreement, Caribou and the Existing Third Party Provider may enter into a statement of work or other supplemental document under the Existing Services Agreement with such Existing Third Party Provider to cover the activities subject to this Agreement (each a "**Supplemental Existing Services Agreement Document**"), *provided* that (i) such Supplemental Existing Services Agreement Document complies with each of the requirements set forth in Section 3.9.1, and (ii) Caribou provides AbbVie a copy of the relevant Supplemental Existing Services Agreement Document and a redacted version of the Existing Services Agreement, such redacted portions being limited to those parts of the Existing Services Agreement that do not relate to the activities of the Existing Third Party Provider subject to this Agreement. Subject to reimbursement by AbbVie as set forth in Section 3.8, and further subject to Section 3.9.3, Caribou shall directly pay all such Third Party Providers for all external costs set forth in each Research Plan. Subject to the final decision-making authority of the JGC, Caribou shall direct the activities of such Third Party Providers.

3.9.3 To the extent Third Party Providers would be required to perform GMP activities (including where, under a single agreement, such Third Party Providers perform GLP activities in furtherance of GMP activities) pursuant to a Research Plan or this Agreement for the Manufacture of Collaboration CAR-T Products and Licensed Products for use in AbbVie's Phase I Clinical Studies, except as otherwise expressly agreed by the Parties, AbbVie shall enter into agreements (including service agreements and quality agreements) with such Third Party Providers (such Third Party Provider, an "**AbbVie-Retained Third Party Provider**") pursuant to which AbbVie shall: (i) directly pay such AbbVie-Retained Third Party Providers' costs, as set forth in the applicable Research Plan, in lieu of reimbursing Caribou for such costs; (ii) ensure such AbbVie-Retained Third Party Providers will take instructions from and otherwise reasonably cooperate with Caribou such that Caribou may discharge its obligations under this Agreement; and (iii) list Caribou as an express third party beneficiary. Caribou agrees that it shall enter into a three-party confidentiality agreement with each relevant AbbVie-Retained Third Party Provider, such that confidentiality obligations run to and among each of Caribou, AbbVie, and the AbbVie-Retained Third Party Provider, and further agrees that it shall cooperate with AbbVie as reasonably necessary for AbbVie to negotiate and execute such two- and three-party agreements. Notwithstanding the foregoing, Caribou shall remain responsible for its obligations under the applicable Research Plan and this Agreement and shall provide the necessary instructions to the AbbVie-Retained Third Party Provider for execution of such applicable obligations.

3.10 Supply of Technology for Development Purposes. On a Program Slot-by-Program Slot basis:

3.10.1 Promptly after the Effective Date, to the extent not done so already, Caribou shall, and shall cause its Affiliates to, without additional compensation, disclose and make available to AbbVie, in whatever form AbbVie may reasonably request, Caribou Background Know-How, [***] Know-How and any other subject matter claimed or covered by any Caribou Background Patent or [***] Patent, all of the foregoing as of the date hereof, to the extent reasonably necessary or useful for AbbVie's performance of its obligations under any Research Plan or this Agreement or the exercise of any of AbbVie's rights under this Agreement;

3.10.2 During the Term, to the extent not done so already, Caribou shall, and shall cause its Affiliates to, without additional compensation, reasonably promptly disclose and make available to AbbVie, in such form as maintained by Caribou in the ordinary course of business, such Regulatory Documentation, Caribou Background Know-How, Caribou Collaboration Know-How, [***] Know-How and any other subject matter claimed or covered by any Caribou Background Patent, Caribou Collaboration Patent or [***] Patent to the extent reasonably necessary or useful

for AbbVie's utilization of the Caribou Platform Technology, AbbVie's Exploitation of a Collaboration CAR-T Product or a Licensed Product, or [***] on the terms and conditions set forth in this Agreement, such disclosure to be made reasonably promptly after the making, conception, or reduction to practice of such Regulatory Documentation, Caribou Background Know-How, Caribou Collaboration Know-How, [***] Know-How and any other Information; and

[***] During the applicable Research Collaboration Term and subsequent Transition Plan, for no additional consideration Caribou shall provide AbbVie with all reasonable assistance required in order to provide to AbbVie, in a timely manner, the Regulatory Documentation, Caribou Background Know-How, Caribou Collaboration Know-How, [***], [***] Know-How and any other subject matter required to be produced pursuant to Section 3.10.2, and shall assist AbbVie with respect to the Exploitation of any Collaboration CAR-T Products and any Licensed Products, to the extent necessary for AbbVie to reproduce activities performed by Caribou under the applicable Research Plan. Without prejudice to the generality of the foregoing, if visits of Caribou's representatives to AbbVie's facilities are reasonably requested by AbbVie for purposes of providing the Regulatory Documentation, Caribou Background Know-How, Caribou Collaboration Know-How, [***], [***] Know-How and any other subject matter to AbbVie, or for purposes of providing AbbVie the assistance referenced in the preceding sentence, at AbbVie's cost, Caribou shall send appropriate representatives to AbbVie's facilities. [***]

3.11 Provision of Certain Materials.

3.11.1 Generally. During the Research Collaboration Term, each Party may provide the other Party with Provided Materials in accordance with the applicable Research Plan or as otherwise agreed to by the JGC. Neither Party shall administer any Provided Material to any human.

3.11.2 AbbVie Materials. Caribou shall use any and all Provided Materials received from AbbVie solely in connection with conducting the activities specified in the applicable Research Plan, as applicable, or for the specific purpose approved by AbbVie. All right, title, and interest in and to Provided Materials of AbbVie shall remain the sole and exclusive property of AbbVie, notwithstanding the transfer to and use by Caribou of the same. [***] At the end of the Term (or, with respect to Provided Materials provided by AbbVie, such earlier time as AbbVie may request in writing once Caribou no longer needs such Provided Materials for purposes of the Development activities conducted by Caribou), Caribou shall either destroy or return to AbbVie, at AbbVie's sole discretion, all unused Provided Materials of AbbVie.

3.11.3 Caribou Materials. Title in and to any and all Provided Materials of Caribou shall transfer to AbbVie upon AbbVie's receipt of such Provided Materials. AbbVie's use of such Provided Materials shall be subject to and consistent with the Licenses granted to AbbVie under this Agreement. For clarity, the transfer of title to AbbVie for Provided Materials of Caribou shall not preclude or restrict Caribou's use of any materials retained in Caribou's possession.

3.12 Regulatory Matters. AbbVie shall, as between the Parties, have the sole right to prepare, obtain and maintain (including the setting of the overall regulatory strategy therefor) all INDs, Drug Approval Applications, other Regulatory Approvals and other submissions and to conduct communications with the Regulatory Authorities and governmental authorities in the Territory for the applicable Collaboration CAR-T Product and corresponding Licensed Products. Caribou shall perform the regulatory activities allocated to Caribou in the applicable Research Plan, including drafting certain portions of any IND, and shall otherwise support AbbVie (at Caribou's cost), as may be reasonably necessary, in obtaining Regulatory Approvals for such Collaboration CAR-T Product and Licensed Products and in the activities in support thereof, including providing all documents or other materials in the possession or control of Caribou or any of its Affiliates, upon reasonable request, as may be necessary or reasonably useful for AbbVie or any of its Affiliates or its or their Sublicensees to obtain Regulatory Approvals for the Licensed Products. All Regulatory Documentation (including all Regulatory Approvals) in the Territory relating to the applicable Collaboration CAR-T Product and corresponding Licensed Products shall be owned by, and shall be the sole property and held in the name of, AbbVie or its designated Affiliate, Sublicensee or designee.

ARTICLE 4
DEVELOPMENT AND COMMERCIALIZATION BY ABBVIE

4.1 AbbVie Development and Commercialization. On a Collaboration CAR-T Product-by-Collaboration CAR-T Product basis, following the occurrence of the Transfer Date, AbbVie shall have the sole right to Develop, Manufacture, Commercialize and otherwise Exploit such Collaboration CAR-T Product and applicable Licensed Products in the Field in the Territory in accordance with the terms and conditions of this Agreement; *provided* that (a) Caribou shall continue to be responsible for Manufacturing activities and the supply of Licensed Product for the Phase I Clinical Studies in accordance with the applicable Research Plan, and (b) as set out more fully in the applicable Research Plan, Caribou shall assist AbbVie with the preparation and filing of the applicable IND and in responding to any communications from FDA in respect of the IND.

4.2 Transition Plan. Within [***] days prior to the Transfer Date with respect to a Collaboration CAR-T Product, without additional consideration to Caribou, the Parties shall agree in good faith to a plan ("**Transition Plan**") to transfer to AbbVie (or its designee) as efficiently as possible all Development activities relating to such Collaboration CAR-T Product and any Licensed Products corresponding to such Collaboration CAR-T Product then being undertaken by Caribou. Caribou shall use Commercially Reasonable Efforts to transition all such activities to AbbVie in accordance with the Transition Plan.

4.3 Caribou Transition Obligation. Upon AbbVie's request with respect to a Collaboration CAR-T Product after the applicable Transfer Date, without limiting Section 4.2 and without additional consideration to Caribou:

4.3.1 Caribou shall transfer to AbbVie all of its right, title, and interest in and to, and shall deliver to AbbVie, all Materials used, acquired by, or generated by or on behalf of Caribou or any of its Affiliates or Third Party Providers under the applicable Research Plan;

4.3.2 Caribou shall provide to AbbVie copies of all Know-How Controlled by Caribou arising out of the applicable Program Slot or any Manufacturing activities with respect thereto, including all pre-clinical data and all safety data resulting from a Program Slot or any Manufacturing activities in connection with either of the foregoing; and

4.3.3 Caribou shall assist AbbVie in responding to any communications from the FDA in respect of the IND in accordance with Section 3.12.

4.4 Manufacturing.

4.4.1 General. Unless the Parties otherwise agree, Caribou shall perform the Manufacturing activities designated to it as set forth in the applicable Research Plan, including the designated activities for Manufacture and supply of all pre-clinical requirements of Collaboration CAR-T Products and Licensed Products and managing Third Parties engaged for supply of Phase I clinical requirements of Collaboration CAR-T Products and Licensed Products under each Research Plan in accordance with the terms hereof.

4.4.2 Manufacturing Technology Transfer. Upon AbbVie's written request with respect to a given Collaboration CAR-T Product and Licensed Product, Caribou shall effect a full transfer to AbbVie or its designee (which designee may be an Affiliate or a Third Party Provider) of all Materials and Know-How Controlled by Caribou relating to the then-current process for the Manufacture of such Collaboration CAR-T Product and any corresponding Licensed Products (each, a "**Manufacturing Process**"). Caribou shall provide, shall cause its Affiliates to provide, and shall use Commercially Reasonable Efforts to assist AbbVie in causing all Third Party Providers to provide, all reasonable assistance requested by AbbVie to enable AbbVie (or its Affiliate or designated Third Party Provider, as applicable) to implement each Manufacturing Process at the facilities designated by AbbVie. If requested by AbbVie, such assistance shall include facilitating the entering into of agreements with applicable Third Party suppliers relating to such Collaboration CAR-T Product and any corresponding Licensed Products. Without limitation of the foregoing, in connection with the Manufacturing Process and related transfer:

(a) Caribou shall, and shall cause its Affiliates to, make available to AbbVie (or its Affiliate or designated Third Party Provider, as applicable), and shall use Commercially Reasonable Efforts to assist AbbVie in causing all Third Party Providers to make available to AbbVie, from time to time as AbbVie may request, all Materials and Manufacturing-related Know-How Controlled by Caribou relating to each Manufacturing Process, including methods, reagents and processes and testing/characterization Know-How, and all documentation constituting material support, performance advice, shop practice, standard operating procedures, specifications as to Materials to be used, and control methods, that are necessary or reasonably useful to enable AbbVie (or its Affiliate or designated Third Party manufacturer, as applicable) to use and practice such Manufacturing Process;

(b) Caribou shall cause all appropriate employees and representatives of Caribou and its Affiliates, and shall use Commercially Reasonable Efforts to assist AbbVie in causing all appropriate employees and representatives of Third Party Providers, to meet with employees or representatives of AbbVie (or its Affiliate or designated Third Party Provider, as applicable) at the applicable manufacturing facility at mutually convenient times to assist with the working up and use of each Manufacturing Process and with the training of the personnel of AbbVie (or its Affiliate or designated Third Party Provider, as applicable) to the extent necessary or reasonably useful to enable AbbVie (or its Affiliate or designated Third Party Provider, as applicable) to use and practice such Manufacturing Process;

(c) Without limiting the generality of this Section 4.4.2, Caribou shall cause all appropriate analytical and quality control laboratory employees and representatives of Caribou and its Affiliates, and shall use Commercially Reasonable Efforts to assist AbbVie in causing all appropriate analytical and quality control laboratory employees and representatives of Third Party Providers, to meet with employees or representatives of AbbVie (or its Affiliate or designated Third Party Provider, as applicable) at the applicable manufacturing facility and make available all necessary equipment, at mutually convenient times, to support and execute the provision of all applicable analytical methods and the validation thereof (including all applicable Know-How, Information and Materials Controlled by Caribou, and sufficient supplies of all primary and other reference standards);

(d) Caribou shall, and shall cause its Affiliates to, take such steps, and shall use Commercially Reasonable Efforts to assist AbbVie in causing Third Party Providers take such steps, as are necessary or reasonably useful to assist AbbVie (or its Affiliate or designated Third Party Provider, as applicable) in obtaining any necessary licenses, permits or approvals from Regulatory Authorities with respect to the Manufacture of the applicable Collaboration CAR-T Products and corresponding Licensed Products at the applicable facilities; and

(e) Caribou shall, and shall cause its Affiliates to, provide, and shall use Commercially Reasonable Efforts to assist AbbVie in causing Third Party Providers to provide, such other assistance as AbbVie (or its Affiliate or designated Third Party Provider, as applicable) may reasonably request to enable AbbVie (or its Affiliate or designated Third Party Provider, as applicable) to use and practice each Manufacturing Process and otherwise to Manufacture the applicable Collaboration CAR-T Products and corresponding Licensed Products.

4.5 Diligence. Following the first occurrence of a Transfer Date, AbbVie shall use Commercially Reasonable Efforts to Develop and Commercialize [***] during the Royalty Term under this Agreement. Caribou acknowledges and agrees that nothing in this Section 4.5 is intended, or shall be construed, to require AbbVie to Develop or Commercialize a specific Licensed Product. Except as set forth in this Section 4.5, AbbVie shall have no other diligence obligations, express or implied, with respect to the Development, Commercialization or other Exploitation of the Licensed Products in the Territory.

4.6 Booking of Sales; Distribution. AbbVie will have the sole right to invoice and book sales, establish all terms of sale (including pricing and discounts) and warehousing, and distribute the Licensed Products in the Territory and to perform or cause to be performed all related services. AbbVie will handle all returns, recalls or withdrawals, order processing, invoicing, collection, distribution, and inventory management with respect to the Licensed Products in the Territory.

4.7 Product Trademarks. Subject to Section 4.8, AbbVie will have the sole right to determine and own the Product Trademarks to be used with respect to the Exploitation of the Licensed Products on a worldwide basis. Caribou will not, and will not permit its Affiliates to, (a) use in their respective businesses, any Trademark that is

confusingly similar to, misleading or deceptive with respect to or that dilutes any (or any part) of the Product Trademarks or (b) do any act which endangers, destroys, or similarly affects, in any material respect, the value of the goodwill pertaining to the Product Trademarks. Caribou agrees to, and will cause its Affiliates to, conform (i) to the customary industry standards for the protection of Product Trademarks for products and such guidelines of AbbVie with respect to manner of use (as provided in writing by AbbVie) of the Product Trademarks, and (ii) to maintain the quality standards of AbbVie with respect to the goods sold and services provided in connection with such Product Trademarks. Caribou will not, and will not permit its Affiliates to, attack, dispute or contest the validity of or ownership of such Product Trademarks anywhere in the Territory or any registrations issued or pending with respect thereto.

4.8 Markings. To the extent required by Applicable Law in a country in the Territory, the promotional materials, packaging and Product Labeling used by AbbVie, its Affiliates and its and their Sublicensees in connection with the Licensed Products in such country will contain (a) the Corporate Name of Caribou and (b) the logo and corporate name of the manufacturer (if other than AbbVie or an Affiliate) (collectively, the "**Markings**").

ARTICLE 5
GRANT OF RIGHTS

5.1 Grants to AbbVie.

5.1.1 Caribou Platform Technology and Other Licenses. Subject to Sections 5.3 and 5.7.1, upon the Effective Date, Caribou (on behalf of itself and its Affiliates) hereby grants to AbbVie and its Affiliates the following licenses (collectively, the "**Licenses**"):

(a) an exclusive (including with regard to Caribou and its Affiliates), royalty-bearing license (or sublicense), with the right to grant sublicenses in accordance with Section 5.3, under all Caribou IP other than: (i) [***] and (ii) [***] IP (which, for clarity, is licensed solely pursuant to Section 5.1.3), in all cases solely to Develop, Commercialize, Manufacture and otherwise Exploit the Collaboration CAR-T Products and Licensed Products in the Field in the Territory;

(b) an exclusive (including with regard to Caribou and its Affiliates) license and right of reference, with the right to grant sublicenses and further rights of reference in accordance with Section 5.3, under all Regulatory Approval and any other Regulatory Documentation that Caribou or its Affiliates may Control with respect to the Collaboration CAR-T Products or Licensed Products as necessary solely for purposes of Exploiting the Collaboration CAR-T Products and Licensed Products in the Field in the Territory;

(c) a non-exclusive, royalty-free license (or sublicense), with the right to grant sublicenses in accordance with Section 5.3, under the Caribou IP other than: (i) [***] and (ii) [***] IP (which, for clarity, is licensed solely pursuant to Section 5.1.3), solely to Develop, Commercialize, Manufacture and otherwise Exploit Companion Diagnostic Products in the Companion Diagnostic Field in the Territory; and

(d) subject to Section 7.1.7, a non-exclusive license, with the right to grant sublicenses in accordance with Section 5.3, to use Caribou's Corporate Names solely as required by Applicable Law to Exploit the Collaboration CAR-T Products or Licensed Products in the Field in the Territory and for no other purpose.

5.1.2 [***] Subject to Sections 5.3, 5.7.1, and 5.9.3, upon:

(a) AbbVie's selection of [***] as a Target for a Program Slot and during the corresponding Research Collaboration Term, Caribou (on behalf of itself and its Affiliates) hereby grants to AbbVie and its Affiliates an exclusive (including with regard to Caribou and its Affiliates), royalty-bearing license (or sublicense), with the right to grant sublicenses in accordance with Section 5.3, under the [***], solely to Develop Collaboration CAR-T Products and Licensed Products in the Field in the Territory. [***]; and

(b)[***], Caribou (on behalf of itself and its Affiliates) hereby grants to AbbVie and its Affiliates an exclusive (including with regard to Caribou and its Affiliates), royalty-bearing license (or sublicense), with the right to grant sublicenses in accordance with Section 5.3, under [***], solely to Develop, Commercialize, Manufacture and otherwise Exploit the Collaboration CAR-T Products and Licensed Products in the Field in the Territory. [***]

5.1.3 [***] IP. Subject to Sections 3.4.1 and 5.7.1, [***] Caribou (on behalf of itself and its Affiliates) hereby grants to AbbVie and its Affiliates an exclusive (including with regard to Caribou and its Affiliates), royalty-bearing license (or sublicense), with the right to grant sublicenses in accordance with Section 5.3, under the [***] solely to Develop, Commercialize, Manufacture and otherwise Exploit the Collaboration CAR-T Products and Licensed Products in the Field in the Territory.

5.2 Grants to Caribou. Upon the Effective Date, AbbVie hereby grants to Caribou and its Affiliates a non-exclusive, royalty-free license, without the right to grant sublicenses (except to Third Party Providers pursuant to Section 3.9), under the AbbVie IP to Develop or Manufacture the Collaboration CAR-T Products and Licensed Products in the Territory solely for purposes of performing its obligations as set forth in, and subject to, each applicable Research Plan.

5.3 Sublicenses. AbbVie and its Affiliates shall have the right to grant sublicenses (or further rights of reference), through multiple tiers of sublicensees, under and within the scope of the Licenses and rights of reference granted in Section 5.1, to its Affiliates and other Persons; *provided* that any such sublicenses shall be consistent with and subject to the terms and conditions of this Agreement.

5.4 Distributorships. AbbVie shall have the right, in its sole discretion, to appoint its Affiliates, and AbbVie and its Affiliates shall have the right, in their sole discretion, to appoint any other Persons, in the Territory or in any country or other jurisdiction of the Territory, to distribute, market, and sell the Licensed Products (with or without packaging rights). Where AbbVie or its Affiliates appoints such a Person and such Person is not an Affiliate of AbbVie, that Person shall be a "**Distributor**" for purposes of this Agreement. The term "**packaging rights**" in this Section 5.4 means the right for the Distributor to package Licensed Products supplied in unpackaged bulk form into individual ready-for-sale packs.

5.5 Existing IP Agreements.

5.5.1 Generally. Except as otherwise expressly set forth in this Agreement, including Sections 3.4 and 5.5.2, all financial obligations, including royalties, due from Caribou to Third Parties under the Existing IP Agreements in consideration of Caribou's or AbbVie's Exploitation of the Caribou IP, the Collaboration CAR-T Products or the Licensed Products as contemplated hereunder are the sole responsibility of Caribou.

5.5.2 [***] Notwithstanding the provisions of Section 5.5.1, if AbbVie selects the [***] in accordance with Section 3.4.2, until the earlier of (a) expiration of the Term (as defined in the [***]), and (b) expiration of the Royalty Term, the royalty rate applicable to Net Sales of such Licensed Product containing such [***] hereunder shall be increased by (i) [***], for annual Net Sales of such Licensed Product less than or equal to [***], and (ii) [***] for annual Net Sales in excess of [***], subject in each case ((i) and (ii)) to the provisions of Section 6.5.4.

5.6 Future In-License Agreements.

5.6.1 Notification. If, during the Term, either Party becomes aware of any Intellectual Property Controlled by a Third Party that (a) relates to the Caribou Platform Technology (or any use thereof or improvement thereto), or (b) otherwise would be necessary or reasonably useful (or, with respect to Patent applications, would be necessary or reasonably useful if such Patent applications were to issue as Patents) for the Development, Manufacture, Commercialization or other Exploitation of a Collaboration CAR-T Product or a Licensed Product in the Field in the Territory, then such Party will notify the JGC that the Development, Manufacture or Commercialization of Collaboration CAR-T Products or Licensed Products may require or benefit from a grant of rights under additional Intellectual Property of Third Parties, whether by license or acquisition (each, a "**Potential In-License**").

5.6.2 Target- or Product-Specific In-Licenses.

(a) Except as set forth in Section 5.6.2(b), AbbVie will have the sole right to enter into Potential In-Licenses in respect of Intellectual Property directed primarily to (i) the then-current Targets or Target Combinations selected and used for the Collaboration CAR-T Products or Licensed Products (such Intellectual Property, "**Target-Specific IP**" and such Potential In-License, "**Target-Specific In-Licenses**") or (ii) the Collaboration CAR-T Products or Licensed Products, (such Intellectual Property, "**Product-Specific IP**" and such Potential In-License, "**Product-Specific In-Licenses**"), in each case ((i) and (ii)), directly without consultation of Caribou, the JGC or any other Committee hereunder.

(b) AbbVie will have the sole right to enter into (i) Target-Specific In-Licenses for Target-Specific IP directed primarily to [***] for use with Collaboration CAR-T Products and Licensed Products that are directed to [***], and (ii) Product-Specific In-Licenses for Product-Specific IP for use with Collaboration CAR-T Products or Licensed Products that are directed to [***]; and, subject to Caribou's compliance with Section 5.9.3, Caribou will have the sole right to enter into (x) Target-Specific In-Licenses for Target-Specific IP directed to [***] for use with Caribou Products, and (y) other in-licenses for IP directed primarily to Caribou Products for use with such Caribou Products that are directed to [***].

(c) Subject to the reduction limit as set forth in Section 6.5.4, AbbVie shall be entitled to offset [***] of the costs of any Target-Specific In-License or Product-Specific In-License [***].

5.6.3 Blocking Platform In-Licenses.

(a) *Generally*.

(i) Caribou shall have the sole right to enter into Potential In-Licenses in respect of Intellectual Property that, assuming that such Intellectual Property is valid and enforceable, would be necessary for utilizing the Caribou Platform Technology (such Intellectual Property, "**Blocking Platform IP**" and such Potential In-License, a "**Blocking Platform In-License**") in connection with Exploitation of, to the extent permitted in Section 5.9, (x) cell therapy products Developed using the Caribou Platform Technology and directed towards Targets other than the then-current Initial Program Targets, Reserved Targets, or Accepted Targets, or (y) cell therapy products Developed using the Caribou Platform Technology and containing the [***] that are not a Collaboration CAR-T Product or a Licensed Product. If Caribou enters into a Blocking Platform In-License, it shall be solely responsible for [***] of the costs of such Blocking Platform In-License[***].

(ii) AbbVie and its Affiliates shall have the sole right to enter into Potential In-Licenses in respect of Blocking Platform IP in connection with Exploitation of a Collaboration CAR-T Product in a Licensed Product but not for the Exploitation of any Caribou Product(s). If AbbVie or its Affiliates enters into such a Blocking Platform In-License it shall have the right to offset the costs of such Blocking Platform In-License[***].

(iii) The Parties hereby acknowledge and agree that their mutual intent with respect to Blocking Platform In-Licenses, including [***] as defined in Section 5.6.3(b), is for each Party (and its Affiliates) to act completely independent of, and without regard to, the interest, benefit, or protection of, the other Party (and its Affiliate) in the identification, negotiation and execution of any Blocking Platform In-License. Without limiting the foregoing,

(A) the Parties acknowledge that each Party has its own assessment about the validity, patentability, enforceability, infringement, liability, or uncertainties associated with potential patent litigation, in connection with any Blocking Platform IP, and that one Party's effort to negotiate or enter into a Blocking Platform In-License for such Blocking Platform IP, including a [***], shall not in any way suggest or indicate that the other Party agrees with the former Party's assessment of the validity, patentability, enforceability, infringement, liability, or any uncertainties associated with potential patent litigation, in connection with such Blocking Platform IP;

(B) Each Party that negotiates or enters into a Blocking Platform In-License hereby agrees that (1) the other Party is not, nor is intended to be, a third party beneficiary of such Blocking Platform In-License and (2) absent prior written consent of the other Party, such Party shall not suggest in any way to the counterparty of the Blocking Platform In-License, or otherwise indicate in the Blocking Platform In-License, that the other Party is or may be a third party beneficiary of such Blocking Platform In-License;

(C) Caribou shall not, and shall ensure that its Affiliates shall not, identify, negotiate or enter into, or assist any Third Party to negotiate or enter into, a Blocking Platform In-License, intended for the benefit or interest of any Collaboration CAR-T Product, Licensed Product or the Exploitation thereof; and

(D) AbbVie shall not, and shall ensure that its Affiliates shall not, identify, negotiate or enter into, or assist any Third Party to negotiate or enter into, a Blocking Platform In-License, intended for the benefit or interest of any Caribou Product(s) or the Exploitation thereof.

(E) [***]

(b) [***]

(i) *Generally.* Notwithstanding Sections 5.6.3(a)(i) and (ii), but subject in all cases to Section 5.6.3(a)(iii), either Party shall have the right to enter into Potential In-Licenses in respect of Intellectual Property that, assuming such Intellectual Property is valid and enforceable, would be necessary for utilizing [***].

(ii) *Caribou Obtains License*. Notwithstanding Sections 5.6.3(a)(i) and (ii), but subject in all cases to Section 5.6.3(a)(iii):

(A) Caribou shall have the sole discretion to enter into a [***], as long as the [***] in-licensed pursuant to such In-License claims or covers a Caribou Product(s) and does not claim or cover the then-current Initial Program Targets, Reserved Targets, or Accepted Targets, or any Collaboration CAR-T Product or Licensed Product or the Exploitation thereof;

(B) Caribou may also enter into a [***] for [***] that claims or covers a Caribou Product(s), and also claims or covers any of the then-current Initial Program Targets, Reserved Targets, or Accepted Targets, or any Collaboration CAR-T Product or Licensed Product or the Exploitation thereof, *provided* that such [***] is not intended for the benefit or interest of any Collaboration CAR-T Product, Licensed Product or the Exploitation thereof. Caribou may, in its sole discretion, include in such [***] the following provisions: Caribou has the right to grant a sublicense (further sublicensable through multiple tiers) under all Intellectual Property in-licensed pursuant to such In-License, which, upon the election of a Third Party (the scope of which includes AbbVie and its Affiliates) to receive a sublicense, such sublicense grants to such Third Party and its Affiliates exclusive or non-exclusive rights under such Intellectual Property to Exploit a product (the scope of which includes Collaboration CAR-T Products and Licensed Products) in a field and territory (the scope of which includes the Field and the Territory).

(C) Caribou shall provide written notice to AbbVie promptly after entering into a [***], and shall disclose in such notice whether such license includes within its scope the right to practice any in-licensed [***] with any then-current Initial Program Targets, Reserved Targets, or Accepted Targets. Any such in-licensed [***] will be excluded from Caribou Background IP unless and until AbbVie elects to receive a sublicense pursuant to Section 5.6.3(b)(ii)(D).

(D) AbbVie may, in its discretion and on written notice to Caribou at any time during the Term, elect to receive a sublicense under any [***] executed by Caribou hereunder to use in the practice of the Licenses and AbbVie's exercise of rights under this Agreement. If AbbVie exercises this right to receive a sublicense, then (1) the Parties shall document the exercise of such right by executing an addendum to this Agreement memorializing AbbVie's receipt of sublicense under the [***] (for clarity, such addendum shall not contain any additional terms or conditions); and (2) all [***] in-licensed thereunder shall be deemed Caribou Background IP.

(E) If Caribou enters into a [***], it shall be solely responsible for [***] of the costs of such [***].

(iii) *AbbVie Obtains License*. If AbbVie or its Affiliates enters into a [***], it shall have the right to offset the costs of such [***] in connection with Exploitation of any Collaboration CAR-T Product or Licensed Product, as provided in Section 6.5.4(c).

5.6.4 Platform Improvement IP In-Licenses.

(a) Caribou will have the first right, in its sole discretion, to enter into Potential In-Licenses in respect of Intellectual Property other than Target-Specific IP, Product-Specific IP, Blocking Platform IP or [***] that would be necessary or reasonably useful for the Exploitation of a Collaboration CAR-T Product or a Licensed Product (such Intellectual Property, "**Platform Improvement IP**" and such Potential In-License, a "**Platform Improvement IP In-License**").

[***]

5.6.5 Reserved Rights. Except as otherwise expressly set forth in Sections 3.9.1 or 5.6 (including Section 5.6.2, with respect to products directed to [***]), during the Term, (a) Caribou and its Affiliates shall be free, without AbbVie's prior written consent, to enter into any agreement with a Third Party in respect of any Information, regulatory documentation, Materials, Patents, or other Intellectual Property not directed primarily to the then-current Targets or Target Combinations selected and used for the Collaboration CAR-T Products or Licensed Products, and (b) neither Caribou nor any of its Affiliates shall, without AbbVie's prior written consent, enter into any agreement with a Third Party in respect of any Information, Regulatory Documentation, Materials, Patents, or other Intellectual Property directed primarily to the then-current Targets or Target Combinations selected and used for the Collaboration CAR-T Products or Licensed Products.

5.7 Retention of All Other Rights.

5.7.1 Notwithstanding the exclusive licenses granted to AbbVie pursuant to Section 5.1, Caribou retains the right to practice under the Caribou IP, all Regulatory Approvals and any other Regulatory Documentation to perform (and to sublicense Third Parties to perform as permitted hereunder) its obligations under this Agreement (including Development, Manufacture and supply of Collaboration CAR-T Products and Licensed Products to AbbVie, as applicable).

5.7.2 Except as expressly provided herein, Caribou grants no other right license or interest of any kind or nature, including any rights, licenses or interests in or to the Caribou Background IP, [***] IP, [***], Regulatory Documentation, Caribou Corporate Names, or any other Patent, technology, or intellectual property or other proprietary rights, including, without limitation, with respect to any Targets not subject to this Agreement or upon Targets ceasing to be the subject of the collaboration under this Agreement pursuant to Section 5.9.2.

5.7.3 Except as expressly provided herein, AbbVie grants no other right or license of any kind or nature, including any rights, licenses or interests in or to the AbbVie IP, the Regulatory Documentation, or any other Patent, technology or intellectual property rights or other proprietary rights not otherwise expressly granted herein.

5.7.4 Notwithstanding the inclusion or incorporation of any [***] in a Collaboration CAR-T Product or Licensed Product, Caribou retains the right to use such [***] independent of this Agreement if, at the time of such inclusion, (a) such [***] constituted Caribou Background IP, or (b) such [***] is generally known in the industry and not claimed or covered by a Patent owned or Controlled by AbbVie or any of its Affiliates at the time of such use by Caribou; *provided* that in no event shall Caribou incorporate or benefit from any AbbVie Background Know-How or AbbVie Collaboration Know-How in such use.

[***]

5.9 Exclusivity.

5.9.1 On a Target-by-Target and Target Combination-by-Target Combination basis, commencing as of the date that such Target or Target Combination first becomes (as outlined below) a subject of the collaboration under this Agreement and ending on [***] Caribou shall not, itself or with or through any Affiliate, license, authorize, appoint, or otherwise enable any Third Party to, directly or indirectly, Develop, Commercialize, or otherwise Exploit any molecule, compound, or other therapeutic that binds to, inhibits or otherwise modulates such Target or Target Combination [***], or any derivative of the foregoing that also binds to, inhibits, or otherwise modulates such Target or Target Combination [***], in each case anywhere in the Territory.

5.9.2 For the purposes of this Section 5.9, (a) a Target or Target Combination (including any single Target within the set of Targets comprising such Target Combination) becomes a subject of the collaboration under this Agreement as of (i) the Effective Date for the Target Combination in the Initial Program Slot or (ii) the date that a Target becomes an Accepted Target, a Substitute Target, or a Reserved Target; and (b) a Target or Target Combination will cease to be subject of the collaboration under this Agreement if (i) either (A) such Target is substituted out of a Program Slot pursuant to Section 3.2.8 (upon Substitution), (B) a Program Slot directed to such Target or Target Combination is terminated, in accordance with ARTICLE 11 (upon the effective date of such termination), or (C) such Target ceases to be a Reserved Target pursuant to Section 3.2.2; and (ii) such Target is not otherwise selected as a Target (or part of a Target Combination) of an active Program Slot under this Agreement.

5.9.3 Notwithstanding the provisions of Section 5.9.1, Caribou shall have the rights to Develop, Commercialize, or otherwise Exploit, or enable a Third Party to Develop, Commercialize, or otherwise Exploit, the [***].

ARTICLE 6
PAYMENTS AND RECORDS.

6.1 Upfront Payment. No later than [***] calendar days following the Effective Date, AbbVie shall pay Caribou a one-time upfront payment equal to Thirty Million Dollars (US$30,000,000). Such payment shall be non-refundable and non-creditable against any other payments due hereunder.

6.2 Equity Investment. [***]

6.3 Additional Program Slot Fees. For each additional Program Slot beyond the first two (2) Program Slots, AbbVie shall pay to Caribou a one-time, non-refundable payment equal to Fifteen Million Dollars (US$15,000,000) (each, an "**Additional Program Slot Fee**") for each such additional Program Slot within [***] calendar days after the applicable Program Slot Exercise Date.

6.4 Milestone Payments.

6.4.1 Development and Regulatory Milestones. In partial consideration of the rights and licenses granted by Caribou to AbbVie hereunder, subject to Section 6.5.4, AbbVie shall pay to Caribou a one-time milestone payment within [***] days after the achievement of each of the following milestones, in respect of the first Licensed Product in a Program Slot to attain such milestone, regardless of whether such milestones were achieved by AbbVie or its Affiliates or Sublicensees, calculated as follows:

[***]

Each such milestone payment shall be non-refundable and payable on a Program Slot-by-Program Slot basis only upon the first achievement of such milestone with respect to such Program Slot, and no amounts shall be due for subsequent or repeated achievements of such milestone, whether by the same or a different Licensed Product, with respect to such Program Slot.

6.4.2 Sales-Based Milestones. In partial consideration of the rights and licenses granted by Caribou to AbbVie hereunder, and subject to Section 6.5.4, in the event that the annual Net Sales of a particular Licensed Product by AbbVie or any of its Affiliates or Sublicensees in a given Calendar Year exceeds a threshold (each, an "**Annual Net Sales-Based Milestone Threshold**") set forth in the left-hand column of the table in this Section 6.4.2 (the "**Annual Net Sales-Based Milestone Table**"), AbbVie shall pay to Caribou a milestone payment (each, an "**Annual Net Sales-Based Milestone Payment**") in the corresponding amount set forth in the right-hand column, as applicable, of the Annual Net Sales-Based Milestone Table. In the event that in a given Calendar Year more than one (1) Annual Net Sales-Based Milestone Threshold is exceeded, AbbVie shall pay to Caribou a separate Annual Net Sales-Based Milestone Payment with respect to each Annual Net Sales-Based Milestone Threshold that is exceeded in such Calendar Year. Each such milestone payment shall be due within [***] days of the end of the Calendar Year in which such milestone was achieved (each, an "**Annual Net Sales-Based Milestone Payment Date**"). Each Annual Net Sales-Based Milestone Payment shall be payable on a Program Slot-by-Program Slot basis only upon the first achievement of such milestone with respect to such Program Slot, and no amounts shall be due for subsequent or repeated achievements of such milestone, whether by the same or a different Licensed Product, with respect to such Program Slot.

Annual Net Sales-Based Milestone Threshold	Annual Net Sales-Based Milestone Payment
Annual Net Sales greater than [***]	[***]
Annual Net Sales greater than [***]	[***]
Annual Net Sales greater than [***]	[***]

6.4.3 For clarity, for each Program Slot the aggregate maximum Development and Regulatory Milestones payable is One Hundred Fifty Million Dollars (US$150,000,000) and the aggregate maximum Sales-Based Milestones payable is Two Hundred Million Dollars (US$200,000,000).

6.5 Royalties.

6.5.1 Royalty Rates. As further consideration for the rights and licenses granted to AbbVie hereunder, subject to Section 6.5.4, commencing upon the First Commercial Sale of a Licensed Product and on a Licensed Product-by-Licensed Product basis and country-by-country basis, AbbVie shall pay to Caribou a tiered royalty on incremental annual Net Sales of such Licensed Product sold by AbbVie and its Affiliates and Sublicensees thereof in the Territory (including all countries in which the Royalty Term has not expired) for each Calendar Year based on the following (and subject to the rate adjustments set forth in Section 5.5.2 and the adjustments set forth below):

Annual Net Sales of a Licensed Product	Royalty Rate
Annual Net Sales less than or equal to [***]	[***]
Annual Net Sales greater than [***] and less than or equal to [***]	[***]
Annual Net Sales greater than [***]	[***]

6.5.2 Calculation of Royalties. With respect to each Licensed Product, royalties on annual Net Sales shall be paid at the rate applicable to the portion of Net Sales of such Licensed Product within each of the Net Sales tiers during such Calendar Year. [***]

6.5.3 Royalty Term. AbbVie shall have no obligation to pay any royalty with respect to Net Sales of any Licensed Product in any country or other jurisdiction after the Royalty Term for such Licensed Product in such country or other jurisdiction has expired.

6.5.4 Reductions. [***]

[***]

6.6 Estimated Sales Levels. Caribou acknowledges and agrees that the sales levels set forth in Section 6.4 shall not be construed as representing an estimate or projection of anticipated sales of the Licensed Products, or implying any level of diligence or Commercially Reasonable Efforts, in the Territory and that the sales levels set forth in such Section are merely intended to define AbbVie's royalty obligations in the event such sales levels are achieved.

6.7 Royalty Payments and Reports. AbbVie shall calculate all amounts payable to Caribou pursuant to Section 6.5 at the end of each Calendar Quarter, which amounts shall be converted to Dollars. AbbVie shall pay to Caribou the royalty amounts due with respect to a given Calendar Quarter within [***] days after the end of such Calendar Quarter. Following First Commercial Sale of a Licensed Product in any country, and regardless of whether a payment is due for a particular Calendar Quarter, each Calendar Quarter of the Term AbbVie shall provide to Caribou a statement of the Net Sales of each Licensed Product in each country or other jurisdiction in the Territory during the applicable Calendar Quarter and a calculation of the amount of royalty payment due (if any) on such Net Sales for such Calendar Quarter.

6.8 Mode of Payment; Offsets. All payments to either Party under this Agreement shall be made by deposit of United States Dollars in the requisite amount to such bank account as the receiving Party may from time to time designate by notice to the paying Party. For the purpose of calculating any sums due under, or otherwise reimbursable pursuant to, this Agreement (including the calculation of Net Sales expressed in currencies other than Dollars), a Party shall convert any amount expressed in a foreign currency into Dollar equivalents using its, its Affiliate's or Sublicensee's standard conversion methodology consistent with Accounting Standards. AbbVie shall have the right to offset any payment that is owed by Caribou but not paid against any payments owed by AbbVie, if any, under this Agreement.

6.9 Interest on Late Payments. If any payment due to either Party under this Agreement is not paid when due, then such paying Party shall pay interest thereon (before and after any judgment) at an annual rate (but with interest accruing on a daily basis) of [***] basis points above [***], such interest to run from the date on which payment of such became due until payment thereof in full together with such interest; *provided, however*, that if the [***] rate is unavailable, then such interest shall be at an annual rate of [***] above the effective federal funds rate published by the Federal Reserve Bank of New York, as adjusted from time to time on the first New York business day of each month.

6.10 Withholding Taxes. Where any sum due to be paid to either Party hereunder is subject to any withholding or similar tax, the Parties shall use their Commercially Reasonable Efforts to do all such acts and things and to sign all such documents as will enable them to take advantage of any applicable double taxation agreement or treaty. In the event there is no applicable double taxation agreement or treaty, or if an applicable double taxation agreement or treaty reduces but does not eliminate such withholding or similar tax, the payor shall remit such withholding or similar tax to the appropriate government authority, deduct the amount paid from the amount due to payee and secure and send to payee the best available evidence of the payment of such withholding or similar tax. Any such amounts deducted by the payor in respect of such withholding or similar tax shall be treated as having been paid by the payor for purposes of this Agreement. In the event that a government authority retroactively determines that a payment made by a Party to the other pursuant to this Agreement should have been subject to withholding or similar (or to additional withholding or

similar) taxes, and such Party (the "**Withholding Party**") remits such withholding or similar taxes to the government authority, including any interest and penalties that may be imposed thereon (together with the tax paid, the "**Withholding Amount**"), the Withholding Party will have the right (a) to offset the Withholding Amount, against future payment obligations of the Withholding Party under this Agreement, (b) to invoice the other Party for the Withholding Amount (which shall be payable by the other Party within [***] days of its receipt of such invoice), or (c) to pursue reimbursement by any other available remedy.

6.11 Indirect Taxes. All payments are exclusive of value added taxes, sales taxes, consumption taxes and other similar taxes (the "**Indirect Taxes**"). If any Indirect Taxes are chargeable in respect of any payments, the paying Party shall pay such Indirect Taxes at the applicable rate in respect of such payments following receipt, where applicable, of an Indirect Taxes invoice in the appropriate form issued by the receiving Party in respect of those payments. The Parties shall issue invoices for all amounts payable under this Agreement consistent with Indirect Tax requirements and irrespective of whether the sums may be netted for settlement purposes. If the Indirect Taxes originally paid or otherwise borne by the paying Party are in whole or in part subsequently determined not to have been chargeable, all commercially reasonable steps will be taken by the receiving Party to receive a refund of these undue Indirect Taxes from the applicable governmental authority or other fiscal authority and any amount of undue Indirect Taxes repaid by such authority to the receiving Party will be transferred to the paying Party within [***] days of receipt.

6.12 Financial Records. AbbVie shall, and shall cause its Affiliates to, keep complete and accurate books and records pertaining to sales of Licensed Products, and the amount and calculation of Net Sales of Licensed Products, in each case in sufficient detail to calculate all amounts payable hereunder and to verify compliance with its obligations under this Agreement. Caribou shall, and shall cause its Affiliates to, keep complete and accurate books and records pertaining to (a) Research Costs under each Research Plan, including books and records of actual expenditures with respect to the budgets set forth in each Research Plan and budget, and (b) amounts paid under (i) the [***] in the event AbbVie selects the [***] in accordance with Section 3.4.2, and (ii) any Platform Improvement IP In-License for which AbbVie elects to receive a sublicense pursuant to Section 5.6.4(e), in each case ((a) and (b)), in sufficient detail to calculate all amounts payable hereunder and to verify compliance with its obligations under this Agreement. Each Party and its Affiliates shall retain such books and records until the later of (x) [***] years after the end of the period to which such books and records pertain, and (y) [***].

6.13 Audit. Each Party shall, and shall cause its Affiliates to, permit the other Party or an independent public accounting firm of nationally recognized standing designated by such Party and reasonably acceptable to the other Party, at reasonable times during normal business hours and upon [***] days' prior written notice, to audit the books and records maintained pursuant to this Agreement to ensure the accuracy of all reports and payments made under this Agreement. Such examinations may not (a) be conducted for any Calendar Quarter more than [***] years after the end of such quarter, (b) be conducted more than once in any [***] month period (unless discrepancies are found in a previous audit) or (c) be repeated for any Calendar Quarter. In the course of any audits conducted by an accounting firm, the accounting firm shall disclose only whether the reports are correct or not, and the specific details concerning any discrepancies. No other information shall be shared. Except as provided below, the cost of such audit shall be borne by the requesting Party, unless the audit reveals a variance of [***] or greater from the reported amounts, in which case the audited Party shall pay the variance and reimburse the cost of the audit within [***] days.

6.14 Audit Dispute. In the event of a dispute with respect to any audit, Caribou and AbbVie shall work in good faith to resolve the disagreement. If the Parties are unable to reach a mutually acceptable resolution of any such dispute within [***] days, the dispute shall be submitted for resolution to a certified public accounting firm jointly selected by each Party's certified public accountants or to such other Person as the Parties shall mutually agree (the "**Audit Arbitrator**"). The decision of the Audit Arbitrator shall be final and the costs of such arbitration as well as the initial audit shall be borne between the Parties in such manner as the Audit Arbitrator shall determine. Not later than [***] days after such decision and in accordance with such decision, the audited Party shall pay the additional amounts, with interest from the date originally due, or the auditing Party shall reimburse the excess payments, as applicable.

6.15 Confidentiality. The receiving Party shall treat all information subject to review under this ARTICLE 6 in accordance with the confidentiality provisions of ARTICLE 8 and the Parties shall cause the Audit Arbitrator to enter into a reasonably acceptable confidentiality agreement with the audited Party obligating such firm to retain all such financial information in confidence pursuant to such confidentiality agreement.

6.16 No Other Compensation. Each Party hereby agrees that the terms of this Agreement fully define all consideration, compensation, and benefits, monetary or otherwise, to be paid, granted, or delivered by one (1) Party to the other Party in connection with the transactions contemplated herein. Neither Party previously has paid or entered into any other commitment to pay, whether orally or in writing, any of the other Party's employees, directly or indirectly, any consideration, compensation, or benefits, monetary or otherwise, in connection with the transaction contemplated herein.

[***]

ARTICLE 7
INTELLECTUAL PROPERTY

7.1 Ownership of Intellectual Property.

7.1.1 Ownership of Caribou Background IP. Subject to the rights and licenses granted in Section 5.1 and the other terms and conditions of this Agreement, Caribou (as used in this ARTICLE 7, including its designated Affiliate) shall retain its right, title and interest in and to Caribou Background IP. [***]

7.1.2 Ownership of AbbVie Background IP. Subject to the rights and licenses granted in Section 5.2 and the other terms and conditions of this Agreement, AbbVie (as used in this ARTICLE 7, including its designated Affiliate) shall retain its right, title and interest in and to AbbVie Background IP. [***]

7.1.3 Ownership of Collaboration IP. Subject to the rights and licenses granted in Sections 5.1 and 5.2, as between the Parties:

(a) AbbVie shall solely and exclusively own all right, title, and interest in and to any and all AbbVie Collaboration IP and Caribou shall assign and hereby assigns, and shall cause its Affiliates to assign, to AbbVie all of its right, title, and interest in and to all any and all AbbVie Collaboration IP [***];

(b) Subject to Caribou's compliance with Section 5.6.4(b), (i) Caribou shall solely and exclusively own all right, title and interest in and to any and all Caribou Collaboration IP and (ii) AbbVie shall assign and hereby assigns, and shall cause its Affiliates to assign, to Caribou all of its right, title, and interest in and to all any and all Caribou Collaboration IP; and

(c) no Collaboration IP shall be jointly owned by the Parties.

7.1.4 Invention Disclosure. Each Party shall promptly disclose to the other Party in writing, and shall cause any of its Affiliates and use Commercially Reasonable Efforts to cause any other Person performing activities for such Party or Affiliate under this Agreement to disclose in writing, any invention conceived, reduced to practice, discovered, developed, or made by or on behalf of such Party or Affiliate pursuant to a Research Plan (each a "**Collaboration Invention**"). Caribou hereby covenants and agrees that, without AbbVie's prior written consent, following the Effective Date Caribou shall not, and shall ensure that its Affiliates do not, claim, exemplify or provide sufficient written description for any Collaboration CAR-T Products, Licensed Products, or the Exploitation thereof in any of its patent filings or include or rely on in any of such patent filings any Information generated under this Agreement or permit or authorize any Third Party to do any of the foregoing. [***]

7.1.5 United States Law. The determination of inventorship and whether Collaboration Inventions are conceived, reduced to practice, discovered, developed, or made by or on behalf of a Party, shall, for purposes of this Agreement, be made in accordance with United States patent law and other Applicable Law in the United States irrespective of where such conception, reduction to practice, discovery, development or making occurs.

7.1.6 Assignment Obligations. Each Party shall cause all Persons who perform any activities for such Party under this Agreement to assign (or, if such Party is unable to cause such Person to assign despite such Party's exercise of Commercially Reasonable Efforts, then to contractually obligate such Person to assign; or if such Party is unable to contractually obligate such Person to assign despite such Party's exercise of Commercially Reasonable Efforts, then provide a license under) their rights in any Collaboration Inventions resulting therefrom to such Party.

7.1.7 Ownership of Corporate Names. As between the Parties, Caribou shall retain all right, title, and interest in and to its Corporate Names.

7.2 Maintenance and Prosecution of Patents.

7.2.1 Patent Prosecution and Maintenance of Caribou Collaboration Patents and [***]. Caribou shall have the right, but not the obligation, through the use of internal or outside counsel reasonably acceptable to AbbVie, to prepare, file, prosecute, defend in any oppositions or post-grant proceedings, and maintain the Caribou Collaboration Patents and [***] worldwide, at Caribou's sole cost and expense. Caribou shall keep AbbVie fully informed of all material steps with regard to the preparation, filing, prosecution, defense, and maintenance of Caribou Collaboration Patents and, solely during the [***] including by providing AbbVie with a copy of material communications to and from any patent authority in the Territory regarding such Caribou Collaboration Patents and, as applicable, such [***], and by providing AbbVie drafts of any material filings or responses to be made to such patent authorities in the Territory sufficiently in advance of submitting such filings or responses so as to allow for a reasonable opportunity for AbbVie to review and comment thereon. Caribou shall consider in good faith the requests and suggestions of AbbVie with respect to such Caribou drafts and with respect to strategies for filing and prosecuting the Caribou Collaboration Patents and, solely during the [***], in the Territory[***]. Notwithstanding the foregoing, Caribou shall promptly notify AbbVie of any request for, or filing or declaration of, any interference, opposition, or reexamination relating to a Caribou Collaboration Patent or, solely during the [***], in the Territory. The Parties shall thereafter consult and cooperate to determine a course of action with respect to any such proceeding in the Territory and Caribou shall consider in good faith all comments, requests and suggestions provided by AbbVie[***]. Caribou shall not initiate any such adversarial patent office proceeding relating to a Caribou Collaboration Patent or, solely during the [***], in the Territory without first consulting AbbVie. In the event that Caribou decides not to prepare, file, prosecute, defend, or maintain a Caribou Collaboration Patent or, solely during the [***], in a country or other jurisdiction in the Territory, Caribou shall provide reasonable prior written notice to AbbVie of such intention, and AbbVie shall thereupon have the option, in its sole discretion, to assume the control and direction of the preparation, filing, prosecution, defense, and maintenance of such Caribou Collaboration Patent and, as applicable, such [***] at its expense in such country or other jurisdiction. Caribou shall reasonably cooperate with AbbVie in such country or other jurisdiction as provided under Section 7.2.3.

7.2.2 Patent Prosecution and Maintenance of AbbVie Collaboration Patents. AbbVie shall have the right, but not the obligation, to prepare, file, prosecute, defend in any oppositions or post-grant proceedings, and maintain the AbbVie Collaboration Patents worldwide, at AbbVie's sole cost and expense. AbbVie shall keep Caribou fully informed of all material steps with regard to the preparation, filing, prosecution, defense, and maintenance of AbbVie Collaboration Patents, including by providing Caribou with a copy of material communications to and from any patent authority in the Territory regarding such AbbVie Collaboration Patents, and by providing Caribou drafts of any material filings or responses to be made to such patent authorities in the Territory sufficiently in advance of submitting such filings or responses so as to allow for a reasonable opportunity for Caribou to review and comment thereon. AbbVie shall consider in good faith the requests and suggestions of Caribou with respect to such AbbVie drafts and with respect to strategies for filing and prosecuting the AbbVie Collaboration Patents in the Territory.

7.2.3 Cooperation. The Parties agree to cooperate fully in the preparation, filing, prosecution, defense in oppositions or post-grant proceedings, and maintenance of the Caribou Collaboration Patents, the AbbVie Collaboration Patents and, solely during the [***], in the Territory under this Agreement. Cooperation shall include:

(a) without limiting any other rights and obligations of the Parties under this Agreement, cooperating with respect to the timing, scope and filing of such Patents to preserve and enhance the patent protection for Collaboration CAR-T Products and Licensed Products, including the manufacture and use thereof;

(b) executing all papers and instruments, or requiring its employees or contractors to execute such papers and instruments, so as to (i) effectuate the ownership of Intellectual Property set forth in Section 7.1.3, (ii) enable the other Party to apply for and to prosecute Patent applications in the Territory, and (iii) obtain and maintain any patent term extensions, supplementary protection certificates, and the like with respect to such Patents in the Territory; in each case ((i), (ii), and (iii)), to the extent provided for in this Agreement;

(c) consistent with this Agreement, assisting in any license, transfer or assignment registration processes with applicable governmental authorities that may be available in the Territory for the protection of a Party's interests in this Agreement; and

(d) promptly informing the other Party of any matters coming to such Party's attention that may materially affect the preparation, filing, prosecution, defense, or maintenance of any such Patents in the Territory.

7.2.4 Patent Term Extension and Supplementary Protection Certificate. Notwithstanding anything to the contrary in this Section 7.2, with respect to each Collaboration CAR-T Product or Licensed Product, [***] shall have the sole right at its sole expense to make decisions regarding, and [***] shall have the sole right at its sole expense to apply for, any extension (including patent term extensions, supplementary protection certificate, and pediatric exclusivity) with respect to any Collaboration Patents or any Patent Controlled by [***]. [***] shall keep [***] reasonably informed of its efforts to obtain such extension. [***] shall provide timely and reasonable assistance, as requested by [***], including by taking such action as patent holder as is required under any Applicable Law to obtain any such extension in the Territory. [***] shall have no right to apply for any extension (including patent term extensions, supplementary protection certificate, and pediatric exclusivity) for any Patents in connection with any Collaboration CAR-T Product or Licensed Product. [***]

7.2.5 Patent Listings. As between the Parties, solely with respect to each Collaboration CAR-T Product or Licensed Product, [***] shall have the sole right to determine and make all filings with Regulatory Authorities or other governmental authorities in the Territory with respect to any Patents, including as required or allowed Applicable Law, *provided* that [***] shall obtain [***]'s written consent which shall not be unreasonably withheld, conditioned or delayed, prior to including any [***] [***]in such filings. [***] shall (i) provide to [***] all Information, including a correct and complete list of [***] covering the Collaboration CAR-T Product or Licensed Product or otherwise necessary or reasonably useful to enable [***]to make such filings with Regulatory Authorities or other governmental authorities in the Territory with respect to such Patents, and (ii) cooperate with [***]'s reasonable requests in connection therewith, including provision or submission of relevant documents as a patent owner; in each case ((i) and (ii)), to the extent required or permitted by Applicable Law. [***] shall keep [***] reasonably informed of such listings. [***]

7.3 Enforcement of IP.

7.3.1 Enforcement of Caribou IP. Each Party shall promptly notify the other Party in writing of any alleged or threatened infringement or misappropriation of the Caribou IP by a Third Party in the Territory, of which such Party becomes aware, based on the Exploitation of or an application to register or market, a product containing a Collaboration CAR-T Product or any Licensed Product in the Territory (the "**Product Infringement**"). [***] shall have the first right, but not the obligation, to prosecute any Product Infringement in the Territory [***] at its sole expense and [***] shall retain control of the prosecution of such claim, suit or proceeding[***] In the event [***] prosecutes any [***] [***] shall have the right to join as a party to such claim, suit, or proceeding in the Territory and participate with its own counsel at its own expense; *provided* that [***] shall retain control of the prosecution of such claim, suit, or proceeding. [***] shall keep [***] reasonably informed of any material development in such claim, suit, or proceeding. If [***] decides not to prosecute an [***] [***], then [***] shall timely inform [***] and [***] may prosecute [***] at its own expense.

7.3.2 Enforcement of AbbVie Collaboration IP. Each Party shall promptly notify the other Party in writing of any alleged or threatened infringement or misappropriation of the AbbVie Collaboration IP by a Third Party in the Territory, of which such Party becomes aware, based on the Exploitation of, or an application to register or market, a product containing a Collaboration CAR-T Product or any Licensed Product in the Territory. [***]

7.3.3 Biosimilar Applicants.

(a) Notwithstanding anything to the contrary in this Agreement, [***] shall have the sole right, but not the obligation, to prosecute, manage and settle any litigation with respect to Biosimilar Products and any proceedings associated therewith, including any invalidity, unpatentability or unenforceability challenges, oppositions, and post-grant proceedings in connection therewith. If [***] receives notice or a copy of an application submitted to the FDA or its foreign counterpart for a Biosimilar Product (a "**Biosimilar Application**") for which a Licensed Product is a "reference product," as such term is used in Section 351(i)(4) of the PHSA or the same or like term used in the foreign counterpart, whether or not such notice or copy is provided under any Applicable Law, or otherwise becomes aware that such a Biosimilar Application has been submitted to a Regulatory Authority for a Drug Approval Application, [***] shall, within [***] Business Days, notify and provide [***] copies of such notice or communication to the extent permitted by Applicable Law. [***] shall carry out any such rights and responsibilities of the "reference product sponsor," as defined in Section 351(l)(1)(A) of the PHSA, for purposes of such Biosimilar Application, including bringing an action for patent infringement under Section 351(1)(6) of the PHSA based on any Patents. If requested by [***], [***] shall seek to obtain access to the Biosimilar Application and related confidential information, including in accordance with Section 351(l)(1)(B)(iii) of the PHSA, if applicable.

(b) If permitted pursuant to Applicable Law, upon [***]'s request, [***] shall assist [***] in identifying and listing any Patents pursuant to Section 351(l)(1)(3)(A) or Section 351(l)(7) of the PHSA, in preparing, pursuant to section 351(l)(3)(C) of the PHSA, a detailed statement regarding the reference product sponsor's opinion that the Patent will be infringed and a response to the statement by the filer of the Biosimilar Application concerning validity and enforceability, in negotiating with the filer of the Biosimilar Application pursuant to Section 351(l)(4) of the PHSA, and in selecting Patents for and conducting litigation pursuant to Section 351(l)(5), Section 351(l)(6), and Section 351(l)(9) of the PHSA, to the extent applicable, and shall cooperate with [***] in responding to relevant communications with respect to such lists and statements from the filer of the Biosimilar Application. Upon [***]'s request, [***] shall assist in seeking an injunction against any commercial marketing by the filer of a Biosimilar Application as permitted pursuant to Section 351(l)(8)(B) of the PHSA or in filing an action for infringement against the filer of such Biosimilar Application.

7.3.4 Cooperation. The Parties agree to cooperate fully in any infringement action pursuant to this Section 7.3. Where a Party brings such an action, the other Party shall, where necessary, join in or be named as a necessary party to such action, or furnish a power of attorney solely for such purpose. Unless otherwise set forth herein, the Party that manages any patent infringement litigation in accordance with this Section 7.3 shall have the right to settle such claim; *provided* that neither Party shall have the right to settle any patent infringement litigation under this Section 7.3 in a manner that imposes any out-of-pocket costs or liability on, or involves any admission by, the other Party, without the express written consent of such other Party. The Party commencing the litigation shall keep the other Party reasonably informed of all material developments during the course of the proceedings if doing so would not waive any privilege or violate any court order or Applicable Law.

7.3.5 Recovery. Except as otherwise agreed by the Parties in connection with a cost sharing arrangement, any recovery realized as a result of such litigation described in Section 7.3 (whether by way of settlement or otherwise) shall be first, allocated to reimburse the Parties for their costs and expenses in making such recovery (which amounts shall be allocated pro rata if insufficient to cover the totality of such expenses). Any remainder after such reimbursement is made shall be retained by the Party that has exercised its right to bring the enforcement action[***].

7.3.6 Costs and Expenses. Subject at all times to Section 6.5.4(f), [***] shall be entitled to offset [***] of the reasonable out-of-pocket costs of such litigation described in Section 7.3 that are borne by [***].

7.4 Infringement Claims by Third Parties.

7.4.1 Control. If the Exploitation of a Collaboration CAR-T Product or Licensed Product in the Territory pursuant to this Agreement results in, or may result in, any claim, suit, or proceeding by a Third Party alleging patent infringement by one Party (or its Affiliates), such Party shall promptly notify the other Party thereof in writing (a "**Third Party Infringement Claim**"). The alleged infringing Party (or its Affiliates) shall have the first right, but not the obligation, to defend and control the defense of any such Third Party Infringement Claim at its own expense

(but subject to deduction as provided below), using counsel of its own choice. Without limitation of the foregoing, if the alleged infringing Party finds it necessary or desirable to join the other Party as a party to any such action, the other Party shall execute all papers and perform such acts as shall be reasonably required. Each Party shall keep the other Party reasonably informed of all material developments in connection with any such Third Party Infringement Claim.

7.4.2 Costs.

(a) [***] shall be entitled to offset [***] of all Litigation Costs resulting or arising from a Third Party Infringement Claim arising from use of the Caribou Platform Technology that are borne by [***].

(b) Subject at all times to Section 6.5.4(f), [***] shall be entitled to offset [***] of all Litigation Costs resulting or arising from all other Third Party Infringement Claims that are borne by [***]

7.5 Invalidity or Unenforceability Defenses or Actions.

7.5.1 Notice. Each Party shall promptly notify the other Party in writing of any alleged or threatened assertion of invalidity, unpatentability, or unenforceability of any of the Caribou Patents or AbbVie Patents, by a Third Party, in each case in the Territory and of which such Party becomes aware.

7.5.1 Caribou Background Patents. Caribou shall have the sole right, but not the obligation, to defend and control the defense of the validity, patentability, and enforceability of the Caribou Background Patents at its own expense in the Territory.

7.5.2 Caribou Collaboration Patents and [***]. Caribou shall have the first right, but not the obligation, to defend and control the defense of the validity, patentability, and enforceability of the Caribou Collaboration Patents and the [***] at its own expense in the Territory. AbbVie may participate in any such claim, suit, or proceeding in the Territory with counsel of its choice at its own expense; *provided* that AbbVie shall have this right in respect of the [***] solely during the [***]; and *further provided* that, in all cases, Caribou shall retain control of the defense in such claim, suit, or proceeding. If Caribou elects not to defend or control the defense of such Caribou Collaboration Patents or, during the [***], in a suit brought in the Territory, or otherwise fails to initiate and maintain the defense of any such claim, suit, or proceeding, then AbbVie may conduct and control the defense of any such claim, suit, or proceeding at its own expense.

7.5.3 AbbVie Collaboration Patents. AbbVie shall have the sole right, but not the obligation, to defend and control the defense of the validity, patentability, and enforceability of the AbbVie Collaboration Patents at its own expense in the Territory.

7.5.4 Cooperation. Each Party shall assist and cooperate with the other Party as such other Party may reasonably request from time to time in connection with its activities set forth in this Section 7.5, including by being joined as a necessary party in such claim, suit or proceeding, providing access to relevant documents and other evidence, and making its employees available at reasonable business hours. In connection with any such defense or claim or counterclaim, the controlling Party shall consider in good faith any comments from the other Party and shall keep the other Party reasonably informed of any material steps taken if doing so would not waive any privilege or violate any court order or Applicable Law. Subject to the other terms and conditions of this Agreement, the controlling Party shall have the right to settle such claim, suit or proceeding under this Section 7.5, *provided* that the controlling Party shall not settle any such claim, suit or proceeding in a manner that imposes any out-of-pocket costs or liability on, or involves any admission by, the other Party, without the express written consent of such other Party.

7.5.5 Costs and Expenses. Subject at all times to Section 6.5.4(f), [***] shall be entitled to offset [***] of the reasonable out-of-pocket costs of defending such claim, suit, or proceeding under this Section 7.5 that are borne by [***].

7.6 Third Party Patents.

7.6.1 Without limiting the provisions of Section 5.6, if a Third Party's Patent primarily relates to the Development, Manufacture, Commercialization or other Exploitation of a Collaboration CAR-T Product or corresponding Licensed Product [***] by [***], [***] shall have the sole right, but not the obligation, to challenge the patentability, validity or enforceability of such Patent in any court of competent jurisdiction or before any supra-national, federal, national, regional, state, provincial and local governmental body of competent jurisdiction, including the United States Patent and Trademark Office and the European Patent Office. [***]. [***] shall assist and cooperate with [***] as [***] may reasonably request from time to time in connection with the activities set forth in this Section 7.6.

7.6.2 Notwithstanding anything to the contrary in this Agreement, during the Term either Party (including its Affiliates) shall have the right, but not the obligation to challenge the patentability, validity or enforceability of any Blocking Platform IP in any court or before any federal, national, regional, state, provincial, local or supra-national governmental body, including before the United States Patent and Trademark Office, throughout the Territory, [***] [***] Neither Party (nor its Affiliates) will support or control in any way a challenge initiated by the other Party (or its Affiliates) against the patentability, validity or enforceability of any Blocking Platform IP.

7.7 Product Trademarks.

7.7.1 Ownership and Prosecution of Product Trademarks. [***] shall own all right, title, and interest to the Product Trademarks in the Territory, and shall be responsible for the registration, prosecution, and maintenance thereof. All costs and expenses of registering, prosecuting, and maintaining the Product Trademarks shall be borne solely by [***].

7.7.2 Enforcement of Product Trademarks. [***] shall have the sole right and responsibility for taking such action as [***], after consultation with [***], deems necessary against a Third Party based on any alleged, threatened, or actual infringement, dilution, misappropriation, or other violation of, or unfair trade practices or any other like offense relating to, the Product Trademarks by a Third Party in the Territory. [***] shall bear the costs and expenses relating to any enforcement action commenced pursuant to this Section 7.7.2 and any settlements and judgments with respect thereto, and shall retain any damages or other amounts collected in connection therewith.

7.7.3 Third Party Claims. [***] shall have the sole right and responsibility for defending against any alleged, threatened, or actual claim by a Third Party that the use or registration of the Product Trademarks in the Territory infringes, dilutes, misappropriates, or otherwise violates any Trademark or other right of that Third Party or constitutes unfair trade practices or any other like offense, or any other claims as may be brought by a Third Party against a Party in connection with the use of the Product Trademarks with respect to a Licensed Product in the Territory. [***] shall bear the costs and expenses relating to any defense commenced pursuant to this Section 7.7.3 and any settlements and judgments with respect thereto, and shall retain any damages or other amounts collected in connection therewith.

7.7.4 Notice and Cooperation. In the event [***] becomes aware of any actual or threatened infringement of the Product Trademarks in the Territory and/or of any actual or threatened claim that the use of the Product Trademarks in the Territory violates the rights of any Third Party, [***] shall provide [***] with written notice of same. Each Party agrees to cooperate fully with the other Party with respect to any enforcement action or defense commenced pursuant to this Section 7.7.

7.8 Inventor's Remuneration. Each Party shall be solely responsible for any remuneration that may be due to such Party's inventors under any applicable inventor remuneration laws.

7.9 International Nonproprietary Name. As between the Parties, [***] shall have the sole right and responsibility to select the International Nonproprietary Name or other name or identifier for any Collaboration CAR-T Products or Licensed Products. [***] shall have the sole right and responsibility to apply for submission to the World Health Organization for the International Nonproprietary Name, and submission to the United States Adopted Names Council for the United States Adopted Name.

7.10 Common Interest. All information exchanged between the Parties regarding the prosecution, maintenance, enforcement and defense of Patents under this ARTICLE 7 will be deemed to be Confidential Information of the disclosing Party. In addition, the Parties acknowledge and agree that, with regard to such prosecution, maintenance, enforcement and defense, the interests of the Parties as collaborators, licensors and/or licensees are, for their mutual benefit, to obtain patent protection and plan patent defense against potential patentability/invalidity challenges or infringement activities by Third Parties, and as such, are aligned and are legal in nature. The Parties agree and acknowledge that they have not waived, and nothing in this Agreement constitutes a waiver of, any legal privilege concerning Patents under this ARTICLE 7, including privilege under the common interest doctrine and similar or related doctrines. Notwithstanding anything to the contrary in this Agreement, to the extent a Party has a good faith belief that any information required to be disclosed by such Party to the other Party under this ARTICLE 7 is protected by attorney-client privilege or any other applicable legal privilege or immunity, such Party shall not be required to disclose such information and the Parties shall in good faith cooperate to agree upon a procedure (which may include entering into a specific common interest agreement, disclosing such information on a "for counsel eyes only" basis or similar procedure) under which such information may be disclosed without waiving or breaching such privilege or immunity.

ARTICLE 8
CONFIDENTIALITY AND NON-DISCLOSURE

8.1 Product Information. Caribou recognizes that by reason of, *inter alia*, AbbVie's status as an exclusive licensee pursuant to the grants under Section 5.1, AbbVie has an interest in Caribou maintaining the confidentiality of certain information of Caribou. [***]

8.2 Confidentiality Obligations. At all times during the Term and for a period of [***] years following termination or expiration of this Agreement in its entirety, each Party shall, and shall cause its officers, directors, employees and agents to, keep confidential and not publish or otherwise disclose to a Third Party and not use, directly or indirectly, for any purpose, any Confidential Information furnished or otherwise made known to it, directly or indirectly, by the other Party, except to the extent such disclosure or use is expressly permitted by the terms of this Agreement or is reasonably necessary for the performance of, or the exercise of such Party's rights under, this Agreement. Notwithstanding the foregoing, to the extent the receiving Party can be demonstrated by documentation or other competent proof, the confidentiality and non-use obligations under this Section 8.2 with respect to any Confidential Information shall not include any information that:

8.2.1 has been published by a Third Party or otherwise is or hereafter becomes publicly available by public use, publication, general knowledge or the like through no wrongful act, fault, or negligence on the part of the receiving Party;

8.2.2 has been in the receiving Party's possession prior to disclosure by the disclosing Party without any obligation of confidentiality with respect to such information;

8.2.3 is subsequently received by the receiving Party from a Third Party without restriction and without breach of any agreement between such Third Party and the disclosing Party;

8.2.4 is generally made available to Third Parties by the disclosing Party without restriction on disclosure; or

8.2.5 has been independently developed by or for the receiving Party without reference to, or use or disclosure of, the disclosing Party's Confidential Information;

Specific aspects or details of Confidential Information shall not be deemed to be publicly available or in the possession of the receiving Party merely because the Confidential Information is embraced by more general information publicly available or in the possession of the receiving Party. Further, any combination of Confidential Information shall not be considered publicly available or in the possession of the receiving Party merely because individual elements of such Confidential Information are publicly available or in the possession of the receiving Party unless the combination and its principles are publicly available or in the possession of the receiving Party.

8.3 Permitted Disclosures. Each Party may disclose Confidential Information of the other Party to the extent that such disclosure is:

8.3.1 in the reasonable opinion of the receiving Party's legal counsel, required to be disclosed pursuant to law, regulation or a valid order of a court of competent jurisdiction or other supra-national, federal, national, regional, state, provincial and local governmental body of competent jurisdiction, (including by reason of filing with securities regulators, but subject to Section 8.5); *provided* that the receiving Party shall first have given prompt written notice (and to the extent possible, at least [***] Business Days' notice) to the disclosing Party and given the disclosing Party a reasonable opportunity to take whatever action it deems necessary to protect its Confidential Information (such as, for example, to quash such order or to obtain a protective order or confidential treatment requiring that the Confidential Information and documents that are the subject of such order be held in confidence by such court or governmental body or, if disclosed, be used only for the purposes for which the order was issued). In the event that no protective order or other remedy is obtained, or the disclosing Party waives compliance with the terms of this Agreement, the receiving Party shall furnish only that portion of Confidential Information which the receiving Party is advised by counsel is legally required to be disclosed;

8.3.2 made by or on behalf of the receiving Party to the Regulatory Authorities as required in connection with any filing, application or request for any Regulatory Approval in accordance with the terms of this Agreement; *provided* that reasonable measures shall be taken to assure confidential treatment of such Confidential Information to the extent practicable and consistent with Applicable Law;

8.3.3 made by or on behalf of the receiving Party to a patent authority as may be reasonably necessary or useful for purposes of preparing, obtaining, defending or enforcing a Patent in accordance with the terms of this Agreement; *provided* that reasonable measures shall be taken to assure confidential treatment of such Confidential Information, to the extent such protection is available;

8.3.4 made to its or its Affiliates' financial and legal advisors who have a need to know such disclosing Party's Confidential Information and are either under professional codes of conduct giving rise to expectations of confidentiality and non-use or under written agreements of confidentiality and non-use, in each case, at least as restrictive as those set forth in this Agreement; *provided* that the receiving Party shall remain responsible for any failure by such financial and legal advisors, to treat such Confidential Information as required under this ARTICLE 8;

8.3.5 made by AbbVie or its Affiliates or Sublicensees to its or their advisors, consultants, clinicians, vendors, service providers, contractors, existing or prospective collaboration partners, licensees, sublicensees, or other Third Parties as may be necessary or useful in connection with the Exploitation of a Collaboration CAR-T Product or Licensed Product, [***] employed in a Collaboration CAR-T Product or Licensed Product, or to a molecule, cell, composition, sequence, or vector comprising or encoding such [***], or such specific [***] or otherwise in connection with the performance of its obligations or exercise of its rights as contemplated by this Agreement; *provided* that such Persons shall be subject to obligations of confidentiality and non-use with respect to such Confidential Information substantially similar to the obligations of confidentiality and non-use of the receiving Party pursuant to this ARTICLE 8, with a duration of confidentiality and non-use obligations as appropriate that is no less than [***] years from the effective date of such obligations or, if the disclosure includes [***], with a duration of confidentiality and non-use obligations that is no less than [***] years from the effective date of such obligations); or

8.3.6 made by Caribou or its Affiliates, to its or their advisors, consultants, clinicians, vendors, service providers, contractors, or existing or prospective investors and acquirers, as may be necessary in assisting with Caribou's activities contemplated by this Agreement and/or in evaluating such potential or actual investment or acquisition, as applicable; *provided* that:

(a) all such Persons to which disclosures are made pursuant to this Section 8.3.6 shall be subject to obligations of confidentiality and non-use with respect to such Confidential Information of AbbVie substantially similar to the obligations of confidentiality and non-use of Caribou set forth in this ARTICLE 8, with a duration of confidentiality and non-use obligations as appropriate that is no less than [***] years from the effective date of such obligations for Life Sciences Entities and [***] years from the effective date of such obligations for any other Person;

(b) to the extent such disclosures are made to existing or prospective investors and acquirors, such disclosures shall require AbbVie's prior written consent, not to be unreasonably withheld, conditioned, or delayed; provided that Caribou may make a disclosure to existing or prospective investors and acquirors that are not Life Sciences Entities without AbbVie's prior written consent if (i)(1) the disclosure is limited solely to disclosure of this Agreement (excluding all Research Plans and with the then-current Initial Program Targets, Reserved Targets, and Accepted Targets redacted) and (2) the receiving party has agreed in writing to be bound to the confidentiality requirements set out in clause (a) above, or (ii) (1) the disclosure is limited solely to disclosure of this Agreement (excluding all Research Plans) and a list consisting solely of the UniProt# or gene name of the then-current Initial Program Targets, Reserved Targets, or Accepted Targets, and (2) the receiving party has agreed in writing to be bound to the confidentiality requirements with a duration of confidentiality and non-use obligations no less than [***] years from the effective date of such obligations; and

(c) any disclosure made to existing or prospective investors and acquirors must comply with the following requirements: (a) such investor or acquirer, as applicable, shall be obligated to (1) use the Confidential Information of AbbVie solely for the purposes of evaluating the applicable transaction and shall be prohibited for using any Confidential Information of AbbVie for any other purposes, (2) limit disclosure to persons within such investor or acquirer with a need to know such Confidential Information of AbbVie in order for such acquirer or investor to evaluate the applicable transaction, and (3) use reasonable and customary measures to protect the secrecy of, and avoid any unauthorized use or disclosure of, any Confidential Information of AbbVie; and (b) Caribou shall contractually require each such investor or acquirer with whom Caribou does not enter into a definitive agreement regarding a transaction to return or destroy all Confidential Information of AbbVie upon the termination of negotiations with respect to the applicable transaction, *provided* that such investor or acquirer may (i) keep one (1) copy of the Confidential Information for the sole purpose of compliance or archival purposes, and (ii) retain such additional copies of or any computer records or files containing such Confidential Information that have been created solely by such investor's or acquirer's automatic archiving and back-up procedures, to the extent created and retained in a manner consistent with such investor's or acquirer's standard archiving and back-up procedures, but not for any other use or purpose.

8.4 Use of Name. Except as expressly provided herein, neither Party shall mention or otherwise use the name, logo, or Trademark of the other Party or any of its Affiliates (or any abbreviation or adaptation thereof) in any publication, press release, marketing and promotional material, or other form of publicity without the prior written approval of such other Party in each instance. The restrictions imposed by this Section 8.4 shall not prohibit either Party from: (a) making any disclosure identifying the other Party that, in the opinion of the disclosing Party's counsel, is required by Applicable Law; *provided* that such Party shall submit the proposed disclosure identifying the other Party in writing to the other Party as far in advance as reasonably practicable (and in no event less than [***] Business Days prior to the anticipated date of disclosure) so as to provide a reasonable opportunity to comment thereon; and (b) using a brief description of the subject of this Agreement (including, the other Party's name and logo, title and date of the Agreement, and general scope of the Licenses, but no other terms or conditions thereof) on its website and in corporate presentations; *provided* that a Party proposing such description shall provide a written copy of the proposed language to the other Party for review prior to making such use, and, once approved, that description may be used (without substantive changes) thereafter without the need to seek pre-approval.

8.5 Public Announcements. The Parties have agreed upon the content of a joint press release which shall be issued substantially in the form attached hereto as Schedule 8.5, the release of which the Parties shall coordinate in order to accomplish such release promptly (and in no event longer than [***] Business Days, or as otherwise mutually agreed by the Parties) after execution of this Agreement. Except for such press release or to the extent required by Applicable Law, neither Party shall issue any other public announcement, press release, or other public disclosure or make or direct their representatives to make, directly or indirectly, any public comment, statement or communication with respect to, or otherwise disclose or permit the disclosure of the terms, conditions or other aspects of this Agreement or its subject matter without the other Party's prior written consent. If any such disclosure is, in the opinion of the disclosing Party's counsel, required by Applicable Law or the rules of a stock exchange on which the securities of the disclosing Party are listed, such Party shall submit the proposed disclosure in writing to the other Party as far in advance as reasonably practicable (and in no event less than [***] Business Days prior to the anticipated date of disclosure) along with the

reasons such disclosure is required by Applicable Law, and the time and place the disclosure will be made so as to provide a reasonable opportunity to comment thereon. The Party proposing to make the disclosure will consider in good faith any comments of the other Party related to such disclosure.

8.6 Publications. The Parties acknowledge that scientific publications must be monitored to prevent any adverse effect from premature publication of results of the activities contemplated hereunder and hereby agree that:

8.6.1 Caribou may publish, present, or otherwise disclose (each a "**Disclosure**") Caribou Know-How specifically related to the Caribou Platform Technology; *provided* that Caribou shall not Disclose, and shall cause its Affiliates and shall cause its Third Party Providers and its and their employees and agents not to Disclose any AbbVie Confidential Information or any other Know-How related to the Exploitation of Collaboration CAR-T Products or Licensed Products.

8.6.2 AbbVie, its Sublicensees and its and their respective Affiliates shall have the sole right to Disclose information (including with respect to regulatory matters) regarding the Exploitation of any Collaboration CAR-T Products and Licensed Products; *provided* that (a) such Disclosure is subject to the provisions of ARTICLE 8 with respect to Caribou's Confidential Information, (b) AbbVie may not use the name of Caribou (or insignia, or any contraction, abbreviation or adaptation thereof) without Caribou's prior written permission and (c) AbbVie has provided Caribou with the opportunity for prior review pursuant to Section 8.6.3 solely with respect to any Disclosure related to a Collaboration CAR-T Product or Licensed Product prior to the Initiation of a first Registrational Trial for such Collaboration CAR-T Product or Licensed Product. Following Initiation of a first Registrational Trial for such Collaboration CAR-T Product or Licensed Product, AbbVie shall provide Caribou a courtesy copy of any scientific or technical proposed Disclosure at least a [***] Business Days prior to such Disclosure. [***]

8.6.3 Except as set forth in Section 8.6.2, each Party shall have the right to prior review of any proposed Disclosure relating to the Collaboration CAR-T Products or Licensed Products or that includes Confidential Information of the other Party. Before any such proposed Disclosure is made, the proposing Party shall deliver a then-current copy of such Disclosure to the other Party at least [***] days prior to submitting the paper to a publisher or making the proposed Disclosure. The other Party shall review any such proposed Disclosure and give its comments to the publishing Party within [***] days of the delivery of such proposed Disclosure to the other Party. With respect to oral presentation materials and abstracts, the other Party shall make reasonable efforts to expedite review of such materials and abstracts, and shall return such items as soon as practicable to the proposing Party with appropriate comments, if any, but in no event later than [***] days from the date of delivery to the other Party. Notwithstanding the foregoing, the proposing Party shall comply with any request by the other Party to delete references to such other Party's Confidential Information in any such proposed Disclosure and will withhold publication of any such proposed Disclosure for an additional [***] days in order to permit the Parties to obtain Patent protection if either Party deems it necessary. Any Disclosure shall include recognition of the contributions of the other Party according to standard practice for assigning scientific credit, either through authorship or acknowledgement, as may be appropriate.

8.7 Return of Confidential Information. Upon the effective date of expiration or termination of this Agreement for any reason, either Party may request in writing, and the other Party shall either, with respect to Confidential Information (in the event of termination of this Agreement with respect to one (1) or more Terminated Territories but not in its entirety, solely to the extent relating to such Terminated Territories) to which such other Party does not retain relevant rights under the surviving provisions of this Agreement: (a) as soon as reasonably practicable, destroy all copies of such Confidential Information in the possession of the other Party and confirm such destruction in writing to the requesting Party, or (b) as soon as reasonably practicable, deliver to the requesting Party, at the other Party's expense, all copies of such Confidential Information in the possession of the other Party; *provided* that the other Party shall be permitted to retain one (1) copy of such Confidential Information for the sole purpose of performing any continuing obligations hereunder, as required by Applicable Law, or for archival purposes. Notwithstanding the foregoing, such other Party also shall be permitted to retain such additional copies of or any computer records or files containing such Confidential Information that have been created solely by such Party's automatic archiving and back-up procedures, to the extent created and retained in a manner consistent with such other Party's standard archiving and back-up procedures, but not for any other use or purpose.

8.8 Survival. (a) Except as set forth in the following sentence, this ARTICLE 8 shall survive termination or expiration of this Agreement, and (b) all Confidential Information shall continue to be subject to the terms of this Agreement for the period set forth in Section 8.2. Sections 8.4(b) and 8.6.3 shall not survive termination or expiration of this Agreement; *provided*, *however*, that after the effective date of termination neither Party shall have the right to publish the Confidential Information of the other Party without the other Party's prior written consent.

ARTICLE 9
REPRESENTATIONS AND WARRANTIES

9.1 Mutual Representations and Warranties. Caribou and AbbVie each represents and warrants to the other, as of the Effective Date, and covenants, as follows:

9.1.1 Organization. It is a corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction of its organization, and has all requisite power and authority, corporate or otherwise, to execute, deliver, and perform this Agreement.

9.1.2 Authorization. The execution and delivery of this Agreement and the performance by it of the transactions contemplated hereby have been duly authorized by all necessary corporate action, and do not violate (a) such Party's charter documents, bylaws, or other organizational documents, (b) in any material respect, any agreement, instrument, or contractual obligation to which such Party is bound, (c) any requirement of any Applicable Law, or (d) any order, writ, judgment, injunction, decree, determination, or award of any court or governmental agency presently in effect applicable to such Party.

9.1.3 Binding Agreement. This Agreement is a legal, valid, and binding obligation of such Party enforceable against it in accordance with its terms and conditions, subject to the effects of bankruptcy, insolvency, or other laws of general application affecting the enforcement of creditor rights, judicial principles affecting the availability of specific performance, and general principles of equity (whether enforceability is considered a proceeding at law or equity).

9.1.4 No Inconsistent Obligation. It is not under any obligation, contractual or otherwise, to any Person that conflicts with or is inconsistent in any material respect with the terms of this Agreement, or that would impede the diligent and complete fulfillment of its obligations hereunder.

9.1.5 Provided Materials. It has all rights, permissions and consents in and to the Provided Materials it provides under this Agreement necessary to enable the receiving Party to receive, access and use such Provided Materials as contemplated and authorized by this Agreement, including, to Develop and/or Manufacture Collaboration CAR-T Products and Licensed Products, and, if applicable, to provide any Personal Data Processed by it in connection with its obligations and activities under this Agreement.

9.2 Additional Representations and Warranties of Caribou. [***]

[***]

9.3 Additional Representations and Warranties of AbbVie. [***]

[***]

9.4 DISCLAIMER OF WARRANTIES. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH HEREIN, NEITHER PARTY MAKES ANY REPRESENTATIONS OR GRANTS ANY WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, AND EACH PARTY SPECIFICALLY DISCLAIMS ANY OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR USE OR PURPOSE OR ANY WARRANTY AS TO THE VALIDITY OF ANY PATENTS OR THE NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

ARTICLE 10
INDEMNITY

10.1 Indemnification of Caribou. AbbVie shall indemnify Caribou, its Affiliates and its and their respective directors, officers, employees, and agents (the "**Caribou Indemnitees**") and defend and save each of them harmless, from and against any and all losses, damages, liabilities, penalties, costs, and expenses (including reasonable attorneys' fees and expenses) (collectively, "**Losses**") in connection with any and all suits, investigations, claims, or demands of Third Parties (collectively, "**Third Party Claims**") incurred by or rendered against the Caribou Indemnitees arising from or occurring as a result of: [***].

10.2 Indemnification of AbbVie. Caribou shall indemnify AbbVie, its Affiliates and its and their respective directors, officers, employees, and agents (the "**AbbVie Indemnitees**"), and defend and save each of them harmless, from and against any and all Losses in connection with any and all Third Party Claims incurred by or rendered against the AbbVie Indemnitees arising from or occurring as a result of: [***].

10.3 Notice of Claim. All indemnification claims in respect of a Party, its Affiliates, or their respective directors, officers, and employees shall be made solely by such Party to this Agreement (the "**Indemnified Party**"). The Indemnified Party shall give the indemnifying Party prompt written notice (an "**Indemnification Claim Notice**") of any Losses, Third Party Claim, or discovery of fact upon which such Indemnified Party intends to base a request for indemnification under this ARTICLE 10, but in no event shall the indemnifying Party be liable for any Losses that result from any delay in providing such notice. Each Indemnification Claim Notice must contain a description of the Third Party Claim and the nature and amount of such Loss (to the extent that the nature and amount of such Loss is known at such time). The Indemnified Party shall furnish promptly to the indemnifying Party copies of all papers and official documents received in respect of any Losses and Third Party Claims.

[***]

10.5 Control of Defense.

10.5.1 In General. Subject to the provisions of Section 10.4, at its option, the indemnifying Party may assume the defense of any Third Party Claim by giving written notice to the Indemnified Party within [***] days after the indemnifying Party's receipt of an Indemnification Claim Notice. The assumption of the defense of a Third Party Claim by the indemnifying Party shall not be construed as an acknowledgment that the indemnifying Party is liable to indemnify the Indemnified Party in respect of the Third Party Claim, nor shall it constitute a waiver by the indemnifying Party of any defenses it may assert against the Indemnified Party's claim for indemnification. Upon assuming the defense of a Third Party Claim, the indemnifying Party may appoint as lead counsel in the defense of the Third Party Claim any legal counsel selected by the indemnifying Party which shall be reasonably acceptable to the Indemnified Party. In the event the indemnifying Party assumes the defense of a Third Party Claim, the Indemnified Party shall immediately deliver to the indemnifying Party all original notices and documents (including court papers) received by the Indemnified Party in connection with the Third Party Claim. Should the indemnifying Party assume the defense of a Third Party Claim, except as provided in Section 10.5.2, the indemnifying Party shall not be liable to the Indemnified Party for any legal expenses subsequently incurred by such Indemnified Party in connection with the analysis, defense or settlement of the Third Party Claim unless specifically requested in writing by the indemnifying Party. In the event that it is ultimately determined that the indemnifying Party is not obligated to indemnify, defend, or hold harmless the Indemnified Party from and against the Third Party Claim, the Indemnified Party shall reimburse the indemnifying Party for any Losses incurred by the indemnifying Party in its defense of the Third Party Claim.

10.5.2 Right to Participate in Defense. Without limiting Section 10.5.1, any Indemnified Party shall be entitled to participate in, but not control, the defense of such Third Party Claim and to employ counsel of its choice for such purpose; *provided* that such employment shall be at the Indemnified Party's own expense unless (a) the employment thereof, and the assumption by the indemnifying Party of such expense, has been specifically authorized by the indemnifying Party in writing, (b) the indemnifying Party has failed to assume the defense and employ counsel in accordance with Section 10.5.1 (in which case the Indemnified Party shall control the defense), or (c) the interests of the Indemnified Party and the indemnifying Party with respect to such Third Party Claim are sufficiently adverse to prohibit the representation by the same counsel of both Parties under Applicable Law, ethical rules or equitable principles.

10.5.3 Settlement. Subject to the provisions of Section 10.4, with respect to any Losses relating solely to the payment of money damages in connection with a Third Party Claim and that shall not result in the Indemnified Party's becoming subject to injunctive or other relief, and as to which the indemnifying Party shall have acknowledged in writing the obligation to indemnify the Indemnified Party hereunder, the indemnifying Party shall have the sole right to consent to the entry of any judgment, enter into any settlement or otherwise dispose of such Loss, on such terms as the indemnifying Party, in its sole discretion, shall deem appropriate. With respect to all other Losses in connection with Third Party Claims, where the indemnifying Party has assumed the defense of the Third Party Claim in accordance with Section 10.5.1, the indemnifying Party shall have authority to consent to the entry of any judgment, enter into any settlement or otherwise dispose of such Loss; *provided* that it obtains the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld, conditioned or delayed). If the indemnifying Party does not assume and conduct the defense of a Third Party Claim as provided above, the Indemnified Party may defend against such Third Party Claim. Regardless of whether the indemnifying Party chooses to defend or prosecute any Third Party Claim, no Indemnified Party shall admit any liability with respect to, or settle, compromise or dispose of any Third Party Claim without the prior written consent of the indemnifying Party, which consent shall not to be unreasonably withheld, conditioned or delayed. The indemnifying Party shall not be liable for any settlement, compromise or other disposition of a Loss by an Indemnified Party that is reached without the written consent of the indemnifying Party, which consent shall not be unreasonably withheld, conditioned, or delayed.

10.5.4 Cooperation. Regardless of whether the indemnifying Party chooses to defend or prosecute any Third Party Claim, the Indemnified Party shall, and shall cause each indemnitee to, cooperate in the defense or prosecution thereof and shall furnish such records, information and testimony, provide such witnesses and attend such conferences, discovery proceedings, hearings, trials and appeals as may be reasonably requested in connection therewith. Such cooperation shall include access during normal business hours afforded to the indemnifying Party to, and reasonable retention by the Indemnified Party of, records and information that are reasonably relevant to such Third Party Claim, and making Indemnified Parties and other employees available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder, and the indemnifying Party shall reimburse the Indemnified Party for all its reasonable out-of-pocket expenses in connection therewith.

10.5.5 Expenses. Except as provided above, the reasonable and verifiable costs and expenses, including fees and disbursements of counsel, incurred by the Indemnified Party in connection with any Third Party Claim shall be reimbursed [***] by the indemnifying Party, without prejudice to the indemnifying Party's right to contest the Indemnified Party's right to indemnification and subject to refund in the event the indemnifying Party is ultimately held not to be obligated to indemnify the Indemnified Party.

[***]

10.7 Insurance. Each Party shall obtain and carry in full force and effect the minimum insurance requirements set forth herein from an insurance company properly licensed to provide the required insurance. Such insurance (a) shall be primary insurance with respect to each Party's own participation under this Agreement, (b) shall be issued by a recognized insurer rated by A.M. Best "A-IX" (or its equivalent) or better, or an insurer pre-approved in writing by the other Party, and (c) shall list the other Party as an additional insured under the General Liability insurance. Each Party shall bear its own costs for obtaining and maintaining insurance with respect to each Party's own participation under this Agreement.

10.7.1 Types and Minimum Limits. The types of insurance, and minimum limits shall include at least the following:

(a) Worker's Compensation with statutory limits in compliance with the Worker's Compensation laws of the state or states in which the Party has employees in the United States (*excluding* Puerto Rico);

(b) Employer's Liability coverage with a minimum limit of [***] per occurrence; *provided* that a Party has employees in the United States (*excluding* Puerto Rico); and

(c) General Liability Insurance with a minimum limit of [***] per occurrence and [***] in the aggregate.

Each Party shall at all times maintain in force any insurance policy that is required by any federal, state, national or other such Applicable Law that may govern or have jurisdiction over any provision of this Agreement and at all times remain fully compliant with any such Applicable Law.

10.7.2 Certificates of Insurance. Upon request by a Party, the other Party shall provide Certificates of Insurance evidencing compliance with the above requirements of this Section 10.7. The insurance policies shall be under an occurrence form, but if only a claims-made form is available to a Party, then such Party shall continue to maintain such insurance after the expiration or termination of this Agreement for the longer of (a) a period of [***] years following termination or (b) expiration of this Agreement in its entirety.

10.7.3 Self-Insurance. Notwithstanding the foregoing, [***] may self-insure, in whole or in part, the insurance requirements described above.

ARTICLE 11
TERM AND TERMINATION

11.1 Term.

11.1.1 Term. This Agreement shall commence on the Effective Date and, unless earlier terminated in accordance herewith, shall continue in force and effect until the date of expiration of the last Royalty Term of the last country in which a Licensed Product is Exploited (such period, the "**Term**").

11.1.2 Effect of Expiration of the Term. [***]

11.2 Termination for Material Breach.

11.2.1 Material Breach. If either Party (the "**Non-Breaching Party**") believes that the other Party (the "**Breaching Party**") has materially breached one (1) or more of its material obligations under this Agreement, then the Non-Breaching Party may deliver written notice of such material breach to the Breaching Party (a "**Default Notice**"). If the Breaching Party does not dispute that it has committed a material breach of one (1) or more of its material obligations under this Agreement, and the Breaching Party fails to cure such breach, or fails to take steps as would be considered reasonable to effectively cure such breach, within [***] after receipt of the Default Notice, or if such compliance cannot be fully achieved within such [***] period and the Breaching Party has failed to commence compliance or has failed to use diligent efforts to achieve full compliance as soon thereafter as is reasonably possible, the Non-Breaching Party may terminate this Agreement. If the Breaching Party disputes that it has materially breached one (1) of its material obligations under this Agreement, the dispute shall be resolved pursuant to Section 12.8 and the Non-Breaching Party may not terminate for such alleged material breach pursuant to this Section 11.2.1 (a) during the pendency of such dispute resolution proceedings or (b) if, as a result of the application of such dispute resolution proceedings, the Breaching Party is determined not to be in any of the material breach(es) alleged by the Non-Breaching Party. If, as a result of the application of such dispute resolution procedures, the Breaching Party is determined to be in material breach of one (1) or more of its material obligations under this Agreement (an "**Adverse Ruling**"), then if the Breaching Party fails to complete the actions specified by the Adverse Ruling to cure such material breach within [***] after such ruling, or if such compliance cannot be fully achieved within such [***] period and the Breaching Party has failed to commence compliance or has failed to use diligent efforts to achieve full compliance as soon thereafter as is reasonably possible, then the Non-Breaching Party may terminate this Agreement upon written notice to the Breaching Party.

11.2.2 Material Breach Related to Diligence. Notwithstanding Section 11.2.1, if at any time Caribou has a reasonable basis to believe that AbbVie is in material breach of its material obligations under Section 4.5, then Caribou shall so notify AbbVie, specifying the basis for its belief, and the Parties shall meet within [***] after such notice to discuss in good faith Caribou's concerns and AbbVie's plans with respect to the applicable Licensed Product, and prior to such meeting Caribou shall not deliver to AbbVie any Default Notice with respect to such alleged material breach. Further, if the material breach and failure to cure contemplated by Section 11.2.1 with respect to AbbVie's obligations under Section 4.5 is solely with respect to a Major Market, to the extent Caribou has the right to terminate following the meeting between the Parties to discuss, Caribou shall not have the right to terminate this Agreement in its entirety, but shall have the right to terminate this Agreement solely with respect to such Major Market.

11.2.3 Material Breach Related to a Licensed Product. Notwithstanding Section 11.2.1, if the material breach and failure to cure contemplated by Section 11.2.1 is with respect to AbbVie's obligations under this Agreement with respect to any particular Licensed Product, Caribou shall not have the right to terminate this Agreement in its entirety, but shall have the right to terminate this Agreement solely with respect to such Licensed Product.

11.2.4 Invocation of Termination for Material Breach. Notwithstanding the foregoing, the Parties agree that termination pursuant to this Section 11.2 is a remedy to be invoked only if the breach cannot be adequately remedied through a combination of specific performance and the payment of money damages.

11.3 Additional Termination Rights by AbbVie.

11.3.1 For Safety. AbbVie may terminate this Agreement, in its entirety or on a Licensed Product-by-Licensed Product basis, effective immediately upon written notice to Caribou if AbbVie in good faith believes that it is not advisable for AbbVie to continue to Exploit the Collaboration CAR-T Product(s) or Licensed Product(s) as a result of a perceived serious safety issue regarding the use of any Collaboration CAR-T Product or Licensed Product.

11.3.2 For Convenience. AbbVie may terminate this Agreement in its entirety, or on a Licensed Product-by-Licensed Product, country-by-country or other jurisdiction-by-other jurisdiction basis, for any or no reason, upon ninety (90) days' prior written notice to Caribou.

11.4 Termination for Insolvency. In the event that either Party (a) files for protection under bankruptcy or insolvency laws, (b) makes an assignment for the benefit of creditors, (c) appoints or suffers appointment of a receiver or trustee over substantially all of its property that is not discharged within [***] after such filing, (d) proposes a written agreement of composition or extension of its debts, (e) proposes or is a party to any dissolution or liquidation, (f) files a petition under any bankruptcy or insolvency act or has any such petition filed against that is not discharged within [***] of the filing thereof, or (g) admits in writing its inability generally to meet its obligations as they fall due in the general course, then the other Party may terminate this Agreement in its entirety effective immediately upon written notice to such Party.

11.5 Rights in Bankruptcy.

11.5.1 Applicability of 11 U.S.C. § 365(n). All rights and licenses (collectively, the "**Intellectual Property Rights**") granted under or pursuant to this Agreement, including all rights and licenses to use improvements or enhancements developed during the Term, are intended to be, and shall otherwise be deemed to be, for purposes of Section 365(n) of the United States Bankruptcy Code (the "**Bankruptcy Code**") or any analogous provisions in any other country or jurisdiction, licenses of rights to "intellectual property" as defined under Section 101(35A) of the Bankruptcy Code. The Parties agree that the licensee of such Intellectual Property Rights under this Agreement shall retain and may fully exercise all of its rights and elections under the Bankruptcy Code, including Section 365(n) of the Bankruptcy Code, or any analogous provisions in any other country or jurisdiction. All of the rights granted to either Party under this Agreement shall be deemed to exist immediately before the occurrence of any bankruptcy case in which the other Party is the debtor.

11.5.2 Rights of non-Debtor Party in Bankruptcy. If a bankruptcy proceeding is commenced by or against either Party under the Bankruptcy Code or any analogous provisions in any other country or jurisdiction, the non-debtor Party shall be entitled to a complete duplicate of (or complete access to, as appropriate) any Intellectual Property Rights and all embodiments of such Intellectual Property Rights, which, if not already in the non-debtor Party's possession, shall be delivered to the non-debtor Party within [***] of such request; *provided*, that the debtor Party is excused from its obligation to deliver the Intellectual Property Rights to the extent the debtor Party continues to perform all of its obligations under this Agreement and the Agreement has not been rejected pursuant to the Bankruptcy Code or any analogous provision in any other country or jurisdiction.

11.6 Modification in Lieu of Termination. If, at any time during the Term, AbbVie has the right to terminate this Agreement pursuant to Sections 11.2.1 or 11.4, in which case, effective as of the date AbbVie delivers such notice of such election to Caribou:

11.6.1 the royalties payable by AbbVie to Caribou hereunder with respect to any Net Sales thereafter shall be equal to [***] of the applicable royalty rate;

11.6.2 the amount of any milestone payment payable by AbbVie to Caribou under Section 6.4 for any milestone event achieved thereafter shall be reduced by [***] of the applicable amount set forth in Section 6.4, as applicable;

11.6.3 AbbVie's diligence obligations pursuant to Section 4.5 shall terminate and be of no further force or effect;

11.6.4 AbbVie shall have the right, in its sole and absolute discretion, to, at its election, disband the JGC and assume all decision making authority previously designated to the JGC; and

11.6.5 all other provisions of this Agreement shall remain in full force and effect without change.

11.7 Termination in Entirety. In the event of a termination of this Agreement in its entirety by either Party:

11.7.1 all rights and licenses granted by Caribou hereunder shall immediately terminate; and

11.7.2 all rights and licenses granted by AbbVie hereunder shall immediately terminate.

11.8 Termination of Terminated Territory. In the event of a termination of this Agreement with respect to a country or other jurisdiction by AbbVie pursuant to Section 11.3.2 or with respect to a Terminated Territory by Caribou pursuant to Section 11.2.2 (but not in the case of any termination of this Agreement in its entirety) all rights and licenses granted by Caribou hereunder (a) shall automatically be deemed to be amended to exclude, if applicable, the right to market, promote, detail, distribute, import, sell, offer for sale, file any Drug Approval Application for, or seek any Regulatory Approval for Collaboration CAR-T Products or Licensed Products in such Terminated Territory, and (b) shall otherwise survive and continue in effect in such Terminated Territory solely for the purpose of furthering any Commercialization of the Collaboration CAR-T Products or Licensed Products in the Territory or any Development or Manufacturing in support thereof.

11.9 Remedies. Except as otherwise expressly provided herein, termination of this Agreement (either in its entirety or with respect to one (1) or more country(ies) or other jurisdiction(s)) in accordance with the provisions hereof shall not limit remedies that may otherwise be available in law or equity.

11.10 Accrued Rights; Surviving Obligations.

11.10.1 Termination or expiration of this Agreement (either in its entirety or with respect to one (1) or more country(ies) or other jurisdiction(s)) for any reason shall be without prejudice to any rights that shall have accrued to the benefit of a Party prior to such termination or expiration. Such termination or expiration shall not relieve a Party from obligations that are expressly indicated to survive the termination or expiration of this Agreement. Without limiting the foregoing, [***] shall survive the termination or expiration of this Agreement for any reason. If this Agreement is terminated with respect to the Terminated Territory but not in its entirety, then following such termination the foregoing provisions of this Agreement shall remain in effect with respect to the Terminated Territory (to the extent they would survive and apply in the event the Agreement expires or is terminated in its entirety), and all provisions not surviving in accordance with the foregoing shall terminate upon termination of this Agreement with respect to the Terminated Territory and be of no further force and effect (and, for purposes of clarity, all provisions of this Agreement shall remain in effect with respect to all countries in the Territory other than the Terminated Territory).

11.10.2 Notwithstanding the termination of AbbVie's licenses and other rights under this Agreement, AbbVie shall have the right for [***] after the effective date of such termination ("**Sell-Off Period**") during which to sell or otherwise dispose of all Collaboration CAR-T Products or Licensed Products then in its inventory as of the date of notice of termination, as though this Agreement had not terminated, and such sale or disposition shall not constitute infringement of Caribou's or its Affiliates' Patent or other intellectual property or other proprietary rights. [***]

ARTICLE 12
MISCELLANEOUS

12.1 Force Majeure. Neither Party shall be held liable or responsible to the other Party or be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement when such failure or delay is caused by or results from events beyond the reasonable control of the non-performing Party, including fires, floods, earthquakes, hurricanes, embargoes, shortages, epidemics, pandemics, quarantines, war, acts of war (whether war be declared or not), terrorist acts, insurrections, riots, civil commotion, strikes, lockouts, or other labor disturbances (whether involving the workforce of the non-performing Party or of any other Person), acts of God or acts, omissions or delays in acting by any governmental authority (except to the extent such delay results from the breach by the non-performing Party or any of its Affiliates of any term or condition of this Agreement). The non-performing Party shall notify the other Party of such force majeure within [***] days after such occurrence by giving written notice to the other Party stating the nature of the event, its anticipated duration, and any action being taken to avoid or minimize its effect. The suspension of performance shall be of no greater scope and no longer duration than is necessary and the non-performing Party shall use Commercially Reasonable Efforts to remedy its inability to perform.

12.2 Change in Control of Caribou.

12.2.1 Caribou (or its successor) shall provide AbbVie with written notice of any Change in Control of Caribou or Acquisition by Caribou within [***] following the signing date of such transaction.

12.2.2 In the event of a Change in Control of Caribou or Acquisition by Caribou, then AbbVie shall have the right, in its sole and absolute discretion, by written notice delivered to Caribou (or its successor) at any time during the [***] following the written notice contemplated by Section 12.2.1, to, at its election (a) disband the JGC and assume all decision making authority previously designated to the JGC, (b) terminate any or all provisions of this Agreement relating to the delivery of information from AbbVie to Caribou, other than any requirements under ARTICLE 6, (c) assume any remaining activities assigned to Caribou hereunder as Step-In Activities following the procedures set forth in Section 3.7 (*mutatis mutandis*) and/or (d) require Caribou and the Change in Control party to adopt reasonable procedures to be agreed upon in writing to prevent disclosure of Confidential Information of AbbVie.

12.3 Export Control. This Agreement is made subject to any restrictions concerning the export of products or technical information from the United States or other countries that may be imposed on the Parties from time to time. Each Party agrees that it will not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products using such technical information to a location or in a manner that at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the appropriate agency or other governmental entity in accordance with Applicable Law.

12.4 Assignment. Without the prior written consent of the other Party, such consent not to be unreasonably withheld, conditioned, or delayed, neither Party shall sell, transfer, assign, delegate, pledge, or otherwise dispose of, whether voluntarily, involuntarily, by operation of law or otherwise, this Agreement or any of its rights or duties hereunder; *provided* that AbbVie may make such an assignment without the other Party's consent to its Affiliate or to a successor, whether in a merger, sale of stock, sale of assets or any other transaction, of the business to which this Agreement relates, to one or more Licensed Products or to its business generally. Any attempted assignment or delegation in violation of this Section 12.4 shall be void and of no effect. All validly assigned and delegated rights and obligations of the Parties hereunder shall be binding upon and inure to the benefit of and be enforceable by and against the successors and permitted assigns of Caribou or AbbVie, as the case may be. The permitted assignee or transferee shall assume all obligations of its assignor or transferor under this Agreement. Without limiting the foregoing, the grant of rights set forth

in this Agreement shall be binding upon any successor or permitted assignee of Caribou, and the obligations of AbbVie, including the payment obligations, shall run in favor of any such successor or permitted assignee of Caribou's benefits under this Agreement.

12.5 Subcontracting.

12.5.1 AbbVie shall have the right to engage Affiliates or Third Party subcontractors (including by appointing one or more contract sales forces, or Distributors) to perform any of its activities under this Agreement.

12.5.2 Caribou shall have the right to subcontract its Development and Manufacturing activities to Third Party Providers subject to Section 3.9.

12.5.3 Any Affiliate or Third Party subcontractor/Third Party Providers to be engaged by a Party to perform a Party's obligations set forth in this Agreement shall meet the qualifications typically required by such Party for the performance of work similar in scope and complexity to the subcontracted activity. Any Party engaging an Affiliate or Third Party subcontractor/Third Party Provider hereunder shall remain principally responsible and obligated for such activities. In addition, each Party engaging a Third Party subcontractor/Third Party Provider with respect to its obligations under a Research Plan shall in all cases retain or obtain exclusive Control of any and all Know-How, Patents or other Intellectual Property created by such subcontractor as a result of such subcontracted activity.

12.6 Severability. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under any present or future law, and if the rights or obligations of either Party under this Agreement will not be materially and adversely affected thereby, (a) such provision shall be fully severable, (b) this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a part hereof, (c) the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance herefrom, and (d) in lieu of such illegal, invalid, or unenforceable provision, there shall be added automatically as a part of this Agreement a legal, valid, and enforceable provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and reasonably acceptable to the Parties. To the fullest extent permitted by Applicable Law, each Party hereby waives any provision of law that would render any provision hereof illegal, invalid, or unenforceable in any respect.

12.7 Governing Law, Jurisdiction and Service.

12.7.1 Governing Law. This Agreement or the performance, enforcement, breach or termination hereof shall be interpreted, governed by and construed in accordance with the laws of the State of Delaware, United States, *excluding* any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction; *provided*, that all questions concerning (a) inventorship of Patents under this Agreement shall be determined in accordance with Section 7.1.5 and (b) the construction or effect of Patents shall be determined in accordance with the laws of the country or other jurisdiction in which the particular Patent has been filed or granted, as the case may be. The Parties agree to exclude the application to this Agreement of the United Nations Convention on Contracts for the International Sale of Goods.

12.7.2 Service. Each Party further agrees that service of any process, summons, notice or document by registered mail to its address set forth in Section 12.9 shall be effective service of process for any action, suit, or proceeding brought against it under this Agreement in any such court.

12.8 Dispute Resolution. Except for disputes resolved by the procedures set forth in Sections 6.14 or 12.12, if a dispute arises between the Parties in connection with or relating to this Agreement or any document or instrument delivered in connection herewith (a "**Dispute**"), it shall be resolved pursuant to this Section 12.8.

12.8.1 General. Any Dispute shall first be referred to the Senior Officers of the Parties, who shall confer in good faith on the resolution of the issue. Any final decision mutually agreed to by the Senior Officers shall be conclusive and binding on the Parties. If the Senior Officers are not able to agree on the resolution of any such issue within [***] (or such other period of time as mutually agreed by the Senior Officers) after such issue was first referred to them, then, [***]

12.8.2 Intellectual Property Disputes. [***]

[***]

12.8.4 Adverse Ruling. Any determination pursuant to this Section 12.8 that a Party is in material breach of its material obligations hereunder shall specify a (nonexclusive) set of actions to be taken to cure such material breach, if feasible.

12.8.5 Interim Relief and Tolling. [***].

12.9 Notices.

12.9.1 Notice Requirements. Any notice, request, demand, waiver, consent, approval, or other communication permitted or required under this Agreement shall be in writing, shall refer specifically to this Agreement and shall be deemed given only if (a) delivered by hand, (b) sent by facsimile transmission (with transmission confirmed), or (c) by internationally recognized overnight delivery service that maintains records of delivery, addressed to the Parties at their respective addresses specified below or to such other address as the Party to whom notice is to be given may have provided to the other Party in accordance with this Section 12.9.1. Such notice shall be deemed to have been given as of the date delivered by hand or transmitted by facsimile (with transmission confirmed) or on the second Business Day (at the place of delivery) after deposit with an internationally recognized overnight delivery service. Any notice delivered by facsimile shall be confirmed by a hard copy delivered as soon as practicable thereafter. This Section 12.9.1 is not intended to govern the day-to-day business communications necessary between the Parties in performing their obligations under the terms of this Agreement.

12.9.2 Address for Notices.

If to AbbVie, to:

[***]

with a copy (which shall not constitute notice) to:

[***]

If to Caribou, to:

[***]

[***]

12.10 Entire Agreement; Amendments. This Agreement, together with the Schedules attached hereto, sets forth and constitutes the entire agreement and understanding between the Parties with respect to the subject matter hereof and all prior agreements, understandings, promises, and representations, whether written or oral, with respect thereto are superseded hereby [***]. Each Party confirms that it is not relying on any representations or warranties of the other Party except as specifically set forth in this Agreement. No amendment, modification, release, or discharge shall be binding upon the Parties unless in writing and duly executed by authorized representatives of both Parties.

12.11 English Language. This Agreement shall be written and executed in, and all other communications under or in connection with this Agreement shall be in, the English language. Any translation into any other language shall not be an official version thereof, and in the event of any conflict in interpretation between the English version and such translation, the English version shall control.

12.12 Equitable Relief. Each Party acknowledges and agrees that the restrictions set forth in Section 5.9, ARTICLE 7 and ARTICLE 8 are reasonable and necessary to protect the legitimate interests of the other Party and that such other Party would not have entered into this Agreement in the absence of such restrictions, and that any breach

or threatened breach of any provision of such Section or Articles will result in irreparable injury to such other Party for which there will be no adequate remedy at law. In the event of a breach or threatened breach of any provision of such Section or Articles, the non-breaching Party shall be authorized and entitled to seek from any court of competent jurisdiction injunctive relief, whether preliminary or permanent, specific performance, and an equitable accounting of all earnings, profits, and other benefits arising from such breach, which rights shall be cumulative and in addition to any other rights or remedies to which such non-breaching Party may be entitled in law or equity. Both Parties agree to waive any requirement that the other (a) post a bond or other security as a condition for obtaining any such relief, and (b) show irreparable harm, balancing of harms, consideration of the public interest, or inadequacy of monetary damages as a remedy. Nothing in this Section 12.12 is intended, or should be construed, to limit either Party's right to equitable relief or any other remedy for a breach of any other provision of this Agreement.

12.13 Waiver and Non-Exclusion of Remedies. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the Party waiving such term or condition. The waiver by either Party hereto of any right hereunder or of the failure to perform or of a breach by the other Party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by such other Party whether of a similar nature or otherwise. The rights and remedies provided herein are cumulative and do not exclude any other right or remedy provided by Applicable Law or otherwise available except as expressly set forth herein.

12.14 No Benefit to Third Parties. Except as provided in ARTICLE 10, covenants and agreements set forth in this Agreement are for the sole benefit of the Parties hereto and their successors and permitted assigns, and they shall not be construed as conferring any rights on any other Persons.

12.15 Further Assurance. Each Party shall duly execute and deliver, or cause to be duly executed and delivered, such further instruments and do and cause to be done such further acts and things, including the filing of such assignments, agreements, documents, and instruments, as may be necessary or as the other Party may reasonably request in connection with this Agreement or to carry out more effectively the provisions and purposes hereof, or to better assure and confirm unto such other Party its rights and remedies under this Agreement.

12.16 Relationship of the Parties. It is expressly agreed that Caribou, on the one hand, and AbbVie, on the other hand, shall be independent contractors and that the relationship between the Parties shall not constitute a partnership, joint venture, or agency, including for all tax purposes. Neither Caribou, on the one hand, nor AbbVie, on the other hand, shall have the authority to make any statements, representations, or commitments of any kind, or to take any action, which shall be binding on the other, without the prior written consent of the other Party to do so. All persons employed by a Party shall be employees of such Party and not of the other Party and all costs and obligations incurred by reason of any such employment shall be for the account and expense of such Party.

12.17 Performance by Affiliates. Each Party may use one (1) or more of its Affiliates to perform its obligations and duties hereunder and such Party Affiliates are expressly granted certain rights herein; *provided* that each such Affiliate shall be bound by the corresponding obligations of such Party and, subject to an assignment to such Affiliate pursuant to Section 12.4, such Party shall remain liable hereunder for the prompt payment and performance of all its respective obligations hereunder.

12.18 Counterparts; Facsimile Execution. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one (1) and the same instrument. This Agreement may be executed by facsimile or electronically transmitted signatures and such signatures shall be deemed to bind each Party hereto as if they were original signatures.

12.19 References. Unless otherwise specified, (a) references in this Agreement to any Article, Section or Schedule shall mean references to such Article, Section or Schedule of this Agreement, (b) references in any Section to any clause are references to such clause of such Section, and (c) references to any agreement, instrument, or other document in this Agreement refer to such agreement, instrument, or other document as originally executed or, if subsequently amended, replaced, or supplemented from time to time, as so amended, replaced, or supplemented and in effect at the relevant time of reference thereto.

12.20 Schedules. In the event of any inconsistencies between this Agreement and any schedules or other attachments hereto, the terms of this Agreement shall control.

12.21 Construction. Except where the context otherwise requires, wherever used, the singular shall include the plural, the plural the singular, the use of any gender shall be applicable to all genders and the word "or" is used in the inclusive sense (and/or). Whenever this Agreement refers to a number of days, unless otherwise specified, such number refers to calendar days. The captions of this Agreement are for convenience of reference only and in no way define, describe, extend, or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The term "including," "include," or "includes" as used herein shall mean "including, but not limited to," and shall not limit the generality of any description preceding such term. The language of this Agreement shall be deemed to be the language mutually chosen by the Parties and no rule of strict construction shall be applied against either Party hereto. Each Party represents that it has been represented by legal counsel in connection with this Agreement and acknowledges that it has participated in the drafting hereof. In interpreting and applying the terms and provisions of this Agreement, the Parties agree that no presumption will apply against the Party which drafted such terms and provisions.

[SIGNATURE PAGES FOLLOW.**]**

THIS AGREEMENT IS EXECUTED by the authorized representatives of the Parties as of the Effective Date.

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz

Name: Rachel E. Haurwitz

Title: President and CEO

THIS AGREEMENT IS EXECUTED by the authorized representatives of the Parties as of the Effective Date.

ABBVIE MANUFACTURING MANAGEMENT UNLIMITED COMPANY

By: /s/ James Egan

Name: James Egan

Title: Director

[Signature Page to Collaboration and License Agreement]

Schedule 1.59

[***]

Schedule 1.64

Caribou CAR-T Technology Patents

[***]

Schedule 1.67

Caribou Cas12a chRDNA Technology Patents

[***]

Schedule 1.154

FTE Rates

[***]

Schedule 3.2.1(A)

Initial Research Plan

(with accompanying budget and auxiliary sheets)

[***]

Schedule 3.2.1(B)

Initial Program Slot

[***]

Schedule 3.2.2

Reserved Targets

[***]

Schedule 3.2.4

Unavailable Targets

[***]

Schedule 3.9

Third Party Providers

[***]

Schedule 8.5

Joint Press Release

PRESS RELEASE

AbbVie and Caribou Biosciences Announce Collaboration and License Agreement for CAR-T Cell Products

– *Collaboration leverages Caribou's next-generation CRISPR genome editing technology platform and AbbVie's antigen-specific binders*

NORTH CHICAGO, Ill., and BERKELEY, Calif., Feb. XX, 2021 – AbbVie (NYSE: ABBV) and Caribou Biosciences, Inc., a leading clinical-stage CRISPR genome editing biotechnology company, announced today that they have entered into a collaboration and license agreement for the research and development of chimeric antigen receptor (CAR)-T cell therapeutics. Although allogeneic, "off-the-shelf" CAR-T cell therapies have shown early promise in some cancer patients, the need for overcoming the rejection of allogeneic CAR-T cells by the host immune system remains a key challenge to their broader development. Employing Caribou's CRISPR genome editing platform to engineer CAR-T cells to withstand host immune attack would enable the development of the next-generation of "off-the-shelf" cellular therapies to benefit a broader patient population.

Under the multi-year agreement, AbbVie will utilize Caribou's next-generation Cas12a CRISPR hybrid RNA-DNA (chRDNA) genome editing and cell therapy technologies to research and develop two new CAR-T cell therapies directed to targets specified by AbbVie. AbbVie will have exclusive rights to Caribou's next-generation Cas12a chRDNA genome editing and cell therapy technologies for the selected targets. Caribou will conduct certain pre-clinical research, development, and manufacturing activities for the collaboration programs, and AbbVie will reimburse Caribou for all such activities pursuant to the collaboration. AbbVie is responsible for all clinical development, commercialization, and manufacturing efforts. AbbVie has the option to pay a fee to expand the collaboration to include up to an additional two CAR-T cell therapies. Caribou will receive $40 million in an upfront cash payment and equity investment, along with up to $300 million in future development, regulatory, and launch milestones. Caribou may also receive additional payments for commercial milestones as well as global tiered royalties.

"We are excited to partner with AbbVie on the development of new CAR-T cell therapies. This collaboration validates Caribou's differentiated next-generation CRISPR genome editing technologies that provide best-in-class efficiency and specificity," said Rachel Haurwitz, Ph.D., President and Chief Executive Officer of Caribou. "We believe AbbVie is an ideal partner for Caribou as we expand upon the number of targets and diseases addressable by our technologies. Genome-edited CAR-T cell therapies hold tremendous potential for patients, and this partnership accelerates our ability to address significant unmet medical need."

"CAR-T therapies have shown to be a promising breakthrough in cancer treatment," said Steve Davidsen, Ph.D., Vice President, Oncology Discovery, AbbVie. "Collaborating with Caribou and their cutting-edge CRISPR platform will help AbbVie advance our efforts to deliver new hope for patients."

About AbbVie

AbbVie's mission is to discover and deliver innovative medicines that solve serious health issues today and address the medical challenges of tomorrow. We strive to have a remarkable impact on people's lives across several key therapeutic areas: immunology, oncology, neuroscience, eye care, virology, women's health and gastroenterology, in addition to products and services across its Allergan Aesthetics portfolio. For more information about AbbVie, please visit us at www.abbvie.com. Follow @abbvie on Twitter, Facebook, Instagram, YouTube and LinkedIn.

About Caribou Biosciences, Inc.

Caribou is a leading clinical-stage CRISPR genome editing biotechnology company founded by pioneers of CRISPR biology. Outside of this collaboration, Caribou is advancing an internal pipeline of allogeneic cell therapies for oncology. CB-010, Caribou's lead allogeneic CAR-T cell program, targets CD19 and is being evaluated in a Phase 1 clinical trial for patients with relapsed/refractory B cell non-Hodgkin lymphoma. CB-011, Caribou's second

allogeneic CAR-T cell therapy, targets BCMA for multiple myeloma, and CB-012, Caribou's third allogeneic CAR-T cell therapy, targets CD371 for acute myeloid leukemia. CB-011 and CB-012 are in preclinical development. Additionally, Caribou is developing iPSC-derived allogeneic natural killer (NK) cell therapies for solid tumors. Through its next-generation CRISPR genome editing technologies, Caribou is implementing multiple strategies to boost CAR-T and NK cell persistence to overcome cell exhaustion and to prevent rapid immune-mediated clearance. These sophisticated edits drive the durability of clinical benefit of these off-the-shelf medicines.

For more information about Caribou, visit www.cariboubio.com and follow the Company @CaribouBio.

"Caribou Biosciences" and the Caribou logo are registered trademarks of Caribou Biosciences, Inc.

AbbVie Forward-Looking Statements

Some statements in this news release are, or may be considered, forward-looking statements for purposes of the Private Securities Litigation Reform Act of 1995. The words "believe," "expect," "anticipate," "project" and similar expressions, among others, generally identify forward-looking statements. AbbVie cautions that these forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those indicated in the forward-looking statements. Such risks and uncertainties include, but are not limited to, failure to realize the expected benefits from AbbVie's acquisition of Allergan plc ("Allergan"), failure to promptly and effectively integrate Allergan's businesses, competition from other products, challenges to intellectual property, difficulties inherent in the research and development process, adverse litigation or government action, changes to laws and regulations applicable to our industry and the impact of public health outbreaks, epidemics or pandemics, such as COVID-19. Additional information about the economic, competitive, governmental, technological and other factors that may affect AbbVie's operations is set forth in Item 1A, "Risk Factors," of AbbVie's 2019 Annual Report on Form 10-K, which has been filed with the Securities and Exchange Commission, as updated by its subsequent Quarterly Reports on Form 10-Q. AbbVie undertakes no obligation to release publicly any revisions to forward-looking statements as a result of subsequent events or developments, except as required by law.

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Schedule 9.2.6(c)

Other Program IP - [***]

[***]

Schedule 12.8.3

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.2

EXCLUSIVE LICENSE AGREEMENT

TABLE OF CONTENTS

EXCLUSIVE LICENSE AGREEMENT

This **Exclusive License Agreement** (the "Agreement") is effective on the date of the last signature below ("Effective Date"), and is by and between **Memorial Sloan Kettering Cancer Center** (hereinafter referred to as "MSK"), a New York not-for-profit corporation with principal offices at 1275 York Avenue, New York, NY 10065, and **Caribou Biosciences, Inc.**, a Delaware corporation with offices at 2929 Seventh St., Suite 105, Berkeley, CA 94710 ("LICENSEE"). MSK and LICENSEE are sometimes referred to singly as "Party" and collectively as "Parties."

WITNESSETH

WHEREAS, MSK owns or Controls (as defined herein) certain Licensed Rights (as defined herein) and desires to have the Licensed Rights utilized in the public interest;

WHEREAS, LICENSEE desires to obtain a license to the Licensed Rights to commercially develop one or more Licensed Products (as defined herein) in the Field (as defined herein); and

WHEREAS, MSK is willing to grant such a license to LICENSEE on the terms and conditions set forth herein for LICENSEE to commercially develop for public availability one or more Licensed Products;

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the sufficiency of which is acknowledged, the Parties hereto agree as follows:

ARTICLE 1 - DEFINITIONS

For the purpose of this Agreement, the following words and phrases shall have the following meanings:

1.1 "Affiliate" as used herein in either singular or plural means, with respect to either Party, any corporation, company, partnership, joint venture, or other entity that, directly or indirectly, Controls (as defined in Section 1.6), is Controlled by, or is under common Control with the specified entity. With regard to MSK, "Affiliate" shall include, without limitation, Sloan-Kettering Institute for Cancer Research and the Memorial Hospital for Cancer and Allied Diseases.

1.2 "Calendar Quarter" means the three (3) month periods ending on March 31, June 30, September 30, and December 31 of each Calendar Year (wherein a Calendar Year is that period of time from January 1 through December 31).

1.3 "Change of Control" means (a) a transaction or series of related transactions involving a Party, in which the shareholders of such Party immediately prior to such transaction or series of related transactions cease to Control such Party after such transaction; (b) a sale or transfer, in a single transaction or series of related transactions, of all or substantially all of the assets or business of such Party to a Third Party; (c) a sale of a Controlling (as defined in Section 1.6) interest of such Party to a Third Party.

1.4 "Commercially Reasonable Efforts" means [***]

1.5 "Confidential Information" means all confidential information disclosed by one Party to the other Party relating to and in the performance of this Agreement including, but not limited to, information about research, development, preclinical, and clinical studies, regulatory affairs, intellectual property, operations, marketing, business plans, financial statements, biological materials, software, product specifications, data, know-how and the like, whether tangible or intangible, and including all copies, abstracts, summaries, analyses, and other derivatives thereof furnished by one Party (the "Disclosing Party") to the other Party (the "Receiving Party") that (a) is disclosed in writing or other tangible form and marked "Confidential," "Proprietary" or in some other manner to indicate its confidential nature; (b) is initially disclosed in oral or other intangible form and subsequently confirmed in writing within [***] calendar days after its initial disclosure; or (c) the nature of the information and the manner of disclosure are such that a reasonable person would understand it to be confidential.

1.6 “Control” means, for purposes of the definition of Affiliates in Section 1.1 and the definition of Change of Control in Section 1.3, the direct or indirect ownership or control of at least [***] of the right to direct or cause the direction of the policies and management of such person or entity, whether by the ownership of stock, by contract or otherwise. In any jurisdiction where [***] control is not permitted by applicable laws, the [***] threshold shall be deemed satisfied by the possession of substantially the maximum percentage allowable in such jurisdiction. With respect to intellectual property, “Control” means ownership together with the ability to grant a license without violating the terms of any written agreement with a Third Party, and/or incurring any payment obligation to a Third Party. With respect to Confidential Information, as set forth in Section 9.3, “Control” means that the Disclosing Party is authorized to disclose such information without violating any obligations of confidentiality to a Third Party.

1.7 “Cover” means, with respect to a Valid Claim and a Licensed Product, that the manufacture, use, offer for sale, sale, or import of such Licensed Product would, but for licenses granted under this Agreement or a judicially created or statutory exemption (including, but not limited to, experimental use or those exemptions provided in 35 U.S.C. § 271(e)(1) or in similar provisions of applicable laws in jurisdictions other than the United States), infringe such Valid Claim; provided, however, that in determining whether a pending Valid Claim would be infringed, such Valid Claim shall be treated as if issued in the form then currently being prosecuted. “Covered” and “Covering” shall have the correlative meaning.

1.8 “Field” means the use of T cells, natural killer (NK) cells, and/or induced pluripotent stem cell (iPSC)-derived cells for allogeneic CD371-targeted cell therapy.

1.9 “Knowledge” means the knowledge of the [***] responsible for this Agreement after reasonable inquiry of the named inventors of the Licensed Patent Rights and/or [***], as applicable, and the actual knowledge of the [***].

1.10 “Licensed Know-How” means the non-public information set forth on Exhibit A attached hereto, which exists as of the Effective Date. Within [***] calendar days of the Effective Date of this Agreement, MSK will transfer to LICENSEE the Licensed Know-How. The Parties may, by mutual agreement, amend Exhibit A during the Term of this Agreement to add after-arising know-how; provided, however, that neither Party is under an obligation to so amend Exhibit A.

1.11 “Licensed Materials” means the biological materials set forth on Exhibit B attached hereto. Within [***] calendar days of the Effective Date of this Agreement, MSK will provide LICENSEE the Licensed Materials.

1.12 “Licensed Patent Rights” means the U.S. provisional patent applications listed in Exhibit C attached hereto; as well as any continuations, divisions, continuations-in-part, substitutions, registrations, reissues, reexaminations, confirmations, renewals, and extensions thereof; foreign counterparts of any of the foregoing; and any and all patents issued thereon.

1.13 “Licensed Rights” means, collectively, the Licensed Know-How, Licensed Materials, and Licensed Patent Rights.

1.14 “Licensed Product” means any CD371-targeted cell therapy in the Field (a) Covered by a Valid Claim of the Licensed Patent Rights, and/or (b) made or developed using the Licensed Know-How and/or Licensed Materials. [***].

1.15 “Net Sales” means, with respect to any and all Licensed Products, gross invoiced amounts for Licensed Products sold by LICENSEE, its Affiliates, and Sublicensees to Third Parties, less applicable [***].

[***]

Combination Products. If a Licensed Product is sold as a Combination Product (as defined below), the Net Sales of such Combination Product for the purpose of calculating royalties for sales of such Combination Product shall be determined as follows: [***].

[***]

1.16 "Sublicensee" means any person or business entity to which LICENSEE or its Affiliates has granted (directly or through another sublicensee) a sublicense, covenant not to sue, or other immunity under any of the Licensed Rights. For clarity, a distributor or sales entity of Licensed Products for LICENSEE is not a Sublicensee.

1.17 "Sublicensee Income" means all upfront cash and/or equity consideration received by LICENSEE from a Sublicensee, but excluding [***].

[***]

1.18 "Term" means the period beginning on the Effective Date of this Agreement and ending on the later of (a) the expiration of the last Valid Claim Covering the composition, manufacture, or use of any Licensed Product; or (b) twelve (12) years from the first commercial sale of the first Licensed Product by LICENSEE, its Affiliate, or Sublicensee, unless earlier terminated pursuant to Article 16.

1.19 "Territory" means worldwide.

1.20 "Third Party" means any person or entity other than LICENSEE or its Affiliates, on the one hand, and MSK and its Affiliates, on the other hand.

1.21 "Valid Claim" means (a) an issued and unexpired claim of a patent that has not been held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and that has not been admitted to be invalid or unenforceable through abandonment, reissue, disclaimer, or otherwise; or (b) a pending patent application that has not been irretrievably cancelled, withdrawn, or abandoned and that has been pending for less than [***] years from the earliest claimed priority date.

ARTICLE 2 - GRANT OF LICENSE; COVENANT NOT TO SUE; [***]

2.1 License Grant. In consideration of LICENSEE's satisfaction of all of its obligations hereunder, MSK hereby grants to LICENSEE an exclusive (even as to MSK except as explicitly reserved in Section 2.2), royalty-bearing license, with the right to sublicense through multiple tiers pursuant to Article 3, to make, have made, use, sell, offer for sale, import, and export Licensed Products in the Territory under the Licensed Rights. LICENSEE (i) shall not, and shall cause its Affiliates to not, use the Licensed Rights outside the Field, and (ii) shall contractually prohibit its Sublicensees from using the Licensed Rights outside the Field.

[***]

2.3 Covenant Not to Sue. Additionally, provided LICENSEE, its Affiliates, and any Sublicensees are in compliance with this Agreement, MSK hereby covenants not to sue LICENSEE, its Affiliates, and Sublicensees during the Term of this Agreement on account of the use, manufacture, sale, offer for sale, import, or export of a Licensed Product for which royalties on Net Sales are due under Section 1.15 (including exemptions set forth therein) for infringement of a patent naming one or more inventors from the [***] that issues from an application having an earliest-claimed priority date less than [***] from the Effective Date that claims expressly the sequence of an scFv within the Licensed Rights.

2.4 No Implied Rights. LICENSEE acknowledges that the licenses granted herein and the covenant not to sue are limited to the Field. Accordingly, except for the licenses expressly granted herein and the covenant not to sue granted herein, LICENSEE agrees that no right, title, or interest of any nature whatsoever is granted whether by implication, estoppel or otherwise. Furthermore, nothing in this Agreement shall prevent or restrict MSK from granting licenses to Third Parties outside of the Field during the Term of this Agreement in the Territory.

[***]

[***]

ARTICLE 3 - SUBLICENSES

3.1 Grant of Sublicenses. Subject to Sections 3.2 and 3.3, LICENSEE may grant sublicenses through multiple tiers at its sole discretion.

3.2 Binding Terms on Sublicensees. Any and all sublicense agreements shall by its terms bind the Sublicensee to the following Articles and Sections of this Agreement: the applicable DEFINITIONS in Article 1; Article 3 (SUBLICENSES); Article 9 (CONFIDENTIALITY); Article 13 (COMPLIANCE WITH LAW); Sections 2.1 (License Grant), 2.2 (Reserved Rights), 2.3 (Covenant Not to Sue), and 2.4 (No Implied Rights); Section 11.1 (Indemnification by LICENSEE); Section 14.3 (Non-Use of Names); and Section 16.7 (Effect on Sublicensees); and shall provide that MSK is a Third-Party beneficiary of such sublicense agreement.

3.3 Sublicense Agreements. LICENSEE shall, within [***] calendar days of execution, provide to MSK a confidential copy of all sublicensing agreements entered into by LICENSEE that include the Licensed Rights. LICENSEE may redact those portions of such sublicensing agreements that do not relate to payments or other obligations due to MSK, provided that outside counsel for MSK has the right to review unredacted copies of such agreements solely to ensure compliance with this Agreement; provided, however, that MSK's outside counsel may not share the redacted portions of such sublicensing agreements with MSK. Additionally, LICENSEE shall provide MSK with a copy of any notice of breach or termination sent to or received from a Sublicensee within [***] calendar days to the extent such notice of breach relates to the Licensed Rights or payments owed thereon.

ARTICLE 4 - DILIGENCE

During the Term, LICENSEE shall use Commercially Reasonable Efforts to research, develop, and commercialize [***] Licensed Product in the United States and in [***] of the following European countries: [***], and the following development milestones shall be met by LICENSEE, its Affiliates, or its Sublicensees:

[***]

ARTICLE 5 - PAYMENTS

5.1 For the rights, privileges, and licenses granted hereunder, LICENSEE shall pay to MSK, in the manner hereinafter provided, the following:

(a) Initial License Fee of Cash and Equity. LICENSEE shall

(i) pay to MSK a nonrefundable and noncreditable initial license fee of Five Hundred Thousand U.S. Dollars ($500,000) due within [***] business days of the Effective Date of this Agreement; and

(ii) issue to MSK 370,845 shares of LICENSEE's common stock, pursuant to a separate subscription agreement in the form set forth in Exhibit F attached hereto between LICENSEE and MSK, within [***] calendar days of the Effective Date of this Agreement. [***].

(b) Annual License Fee. Commencing on the first anniversary of the Effective Date of this Agreement and due on or before each subsequent anniversary thereafter until the first commercial sale of the first Licensed Product, LICENSEE shall pay MSK an annual license fee of [***]. The annual license fee shall be noncreditable against any other obligations hereunder.

(c) Royalties. During the Term of this Agreement, LICENSEE shall pay MSK a royalty on Calendar Year annual Net Sales of Licensed Products at the rates set forth below:

[***]

[***]	[***]
[***]	[***]
[***]	[***]

[***]

(d) Clinical and Regulatory Milestones. The following milestone payments shall be due once for each separate Licensed Product. Within [***] calendar days of the achievement of any of the following milestones by LICENSEE, or within [***] calendar days of the occurrence of any of the milestones achieved by LICENSEE's Affiliate or Sublicensee, LICENSEE shall notify MSK of the achievement of such milestone and pay MSK the applicable milestone payment:

[***]

(e) Commercial Milestones. The following milestone payments shall be due once for each separate Licensed Product. Within [***] calendar days of the achievement of any of the following milestones by LICENSEE, or within [***] calendar days of the occurrence of any of the milestones achieved by LICENSEE's Affiliate or Sublicensee, LICENSEE shall notify MSK of the achievement of such milestone and pay MSK the applicable milestone payment:

[***]

(f) Sublicensee Income. LICENSEE shall pay to MSK a portion of Sublicensee Income within [***] calendar days after LICENSEE receives such Sublicensee Income as follows:

[***]

(g) Success Payment Amounts; Change of Control Payment. As further set forth on Exhibit D attached hereto, MSK shall be eligible to receive certain Success Payment Amounts (as defined on Exhibit D) and a Change of Control Payment (as defined in Exhibit D) from LICENSEE in an aggregate amount not to exceed Thirty-Five Million U.S. Dollars ($35,000,000) based on the value of LICENSEE's stock reaching certain multiples, as determined in accordance with Exhibit D, within a time interval commencing upon the date the first patient is dosed in the first Phase 1 clinical trial of the first Licensed Product ("Initial Date") and ending upon the earlier of (a) the third (3rd) anniversary of receipt of Biologics License Application approval by the FDA for the first Licensed Product, or (b) ten (10) years from the date the first patient is dosed in the first Phase 1 clinical trial of a Licensed Product ("Time Interval"). MSK shall not be eligible to receive Success Payment Amounts or a Change of Control Payment outside of the Time Interval or during an uncured Major Breach pursuant to Section 16.5.

5.2 Method of Payment. Except as permitted by Exhibit D with respect to Success Payment Amounts, all payments due under this Agreement shall be made in the legal currency of the United States and shall be made by bank wire transfer in immediately available funds pursuant to MSK's wire instructions, which MSK shall provide to LICENSEE within [***] business days of the Effective Date of this Agreement. If any currency conversion shall be required in connection with the calculation of amounts payable hereunder, such conversion shall be calculated using the average interbank exchange rate during the applicable Calendar Quarter.

5.3 Interest on Late Payments. Any payments or portions thereof due hereunder which are not paid when due shall bear interest equal to the lesser of the rate equal to prime rate effective for the date that payment was due, as published by *The Wall Street Journal, U.S., Internet Edition*, on the date such payment was due, plus an additional [***], or the maximum rate permitted by applicable laws, calculated on the number of days such payment is delinquent.

5.4 Tax Withholding. Each Party shall be responsible for its own taxes due under this Agreement. LICENSEE shall make payments due under Article 5 or Section 7.1 in full, without deduction or withholding for wire transfer fees. The Parties will cooperate to prevent or minimize the need for any withholding, and, at the request of LICENSEE, MSK will provide LICENSEE with documents evidencing its tax status in the United States. Any withholding or other tax that is required by law to be withheld with respect to payments owed by LICENSEE shall be deducted by LICENSEE from such payment prior to remittance and paid over to the relevant taxing authorities when due. LICENSEE shall provide MSK with evidence of any such taxes withheld and of payment thereof within [***] calendar days of payment, and MSK shall seek to obtain the release of any such withheld amounts from the taxing authority. At MSK's request, LICENSEE shall provide MSK with reasonable assistance to release the withheld amount to MSK. If any amount remains withheld and is not released to MSK within [***] months of the payment due date, then LICENSEE shall pay to MSK the amount that is still withheld, and entitlement to receive such withheld amount from the pertinent taxing authority shall be assigned by MSK to LICENSEE (or paid over by MSK to LICENSEE if the taxing authority releases it directly to MSK).

ARTICLE 6 - RECORDS AND REPORTS

6.1 Books and Records. LICENSEE shall keep, and shall require its Affiliates and Sublicensees to keep, complete and accurate books and records relating to the sale of Licensed Products, as used in the calculation of Calendar Quarter reports under Section 6.2 (including, but not limited to, calculation of Net Sales pursuant to Section 1.15). LICENSEE shall permit an independent qualified public accounting firm engaged by MSK to examine LICENSEE's books and records (which are Confidential Information of LICENSEE) at any reasonable time during business hours upon [***] calendar days' prior written notice, but only with respect to books and records pertaining to the [***] years prior to the end of the most recently completed Calendar Quarter. The foregoing right of review may be exercised by MSK only once during each Calendar Year and may be exercised only once with respect to any records provided for a particular Calendar Quarter. LICENSEE may require that the applicable accountants conducting the audit enter into a standard confidentiality agreement with LICENSEE. The results of any such examination and review will be shared with LICENSEE within [***] calendar days after receipt thereof by MSK. MSK shall bear the cost of any such examination and review; provided that if the inspection and audit shows an underpayment of amounts payable hereunder of [***] or more of the amount due for the applicable Calendar Quarter, then LICENSEE shall reimburse MSK within [***] calendar days of receipt of an invoice for all reasonable costs incurred in connection with such examination. LICENSEE shall pay to MSK the amount of any underpayment revealed by such examination, in addition to interest owed from the date(s) such underpayment(s) were due, within [***] calendar days of receipt of an invoice from MSK for such underpayment and interest. If an overpayment is revealed by such examination, LICENSEE may apply the amount of such overpayment to any payments due to MSK under Article 5, but in no event shall MSK be required to make a payment to LICENSEE.

6.2 Calendar Quarter Reports. Within [***] calendar days after the end of the first Calendar Quarter in which LICENSEE, its Affiliates or Sublicensee is selling a Licensed Product and within [***] calendar days after the end of each Calendar Quarter thereafter during the Term of this Agreement, LICENSEE shall deliver to MSK (a) a detailed report specifying in the aggregate (i) total invoiced amounts to Third Parties for Licensed Products sold by LICENSEE, its Affiliates, and Sublicensees; and (ii) amounts deducted by category (as defined in Section 1.15) from gross invoiced amounts to calculate Net Sales of the Licensed Products; and (b) payment of royalties due; provided, however, for the fourth Calendar Quarter of each Calendar Year, LICENSEE will adjust the amount of royalties due in accordance with Section 5.1(c) for that Calendar Year. In the event that LICENSEE, its Affiliates, or Sublicensees reduces the royalty payment to MSK in accordance with Section 5.1(c)(ii) or (iii), LICENSEE shall furnish reasonably detailed documentation in its Calendar Quarter reports of any such Third-Party royalty payments. All such Calendar Quarter reports and the information contained therein shall be deemed to be the Confidential Information of LICENSEE.

ARTICLE 7 - FILING, PROSECUTION, AND MAINTENANCE OF LICENSED PATENT RIGHTS

7.1 Patent Cost Reimbursement.

(a) Past Costs. LICENSEE shall reimburse MSK for [***] of all past out-of-pocket patent costs for the Licensed Patent Rights within [***] calendar days of receiving itemized past patent costs (including outside counsel invoices),

such amount agreed to between the Parties to be [***]. If requested in writing by MSK, LICENSEE shall, for MSK's convenience, make the payment required by this Section 7.1(a) directly to MSK's outside counsel, and such payment shall satisfy LICENSEE's reimbursement obligation under this Section 7.1(a).

(b) Ongoing Cost Allocation. LICENSEE shall, during the Term of this Agreement, pay a proportion, based on the formula below, of the out-of-pocket expenses borne by MSK for filing, prosecuting, and maintaining patents and patent applications within the Licensed Patent Rights throughout the Territory through MSK's outside patent counsel. LICENSEE's proportion of the patent costs shall be equal to [***]

7.2 Control; Participation Rights. [***]

7.3 Common Legal Interest. The Parties agree that they share a common legal interest in obtaining valid and enforceable patents.

7.4 Challenge to Licensed Patent Rights. [***]

ARTICLE 8 - INFRINGEMENT OF LICENSED PATENT RIGHTS

8.1 Notice of Third-Party Infringement. Each Party shall notify the other Party if it becomes aware of patent infringement of the Licensed Patent Rights by a Third Party.

8.2 Enforcement and Defense. [***] shall have the first right, but not the obligation, for the initiation, defense, and management of any legal proceeding relating to the Licensed Patent Rights (including without limitation any declaratory judgment action, patent infringement action, opposition, inter partes review or post-grant review, nullity proceeding, and the like) ("Patent Action") in the Field, and will be responsible for all expenses related thereto. [***] shall join in any such action, at [***]'s request and expense. If [***] does not wish to exercise either of the foregoing rights, it shall provide [***] with written notice within [***] calendar days of becoming aware of Third-Party infringement or commencement of a legal proceeding against the Licensed Patent Rights that [***] declines such right, and [***] shall have the right, but not the obligation, to prosecute or defend the action at its own expense without joinder of [***].

8.3 Cooperation: Settlement. To the extent either Party conducts any Patent Action in the Field, it shall keep the other Party reasonably informed of such proceedings. The other Party shall reasonably cooperate, at the expense of the requesting Party. Notwithstanding anything in this Agreement to the contrary, no settlement, consent judgment, or other voluntary final disposition of any action by [***] that admits or impairs the invalidity, unenforceability, or scope of the Licensed Patent Rights may be entered into without the prior written consent of [***] in its sole and absolute discretion.

In the event that [***] conducts a Patent Action outside the Field, it shall promptly notify [***], and the Parties shall consult from time to time to keep [***] reasonably apprised of such Patent Action. Any information that is provided by [***] to [***] at [***]'s request shall be deemed to be Confidential Information of [***]. [***] shall not in such proceeding cancel or disclaim any issued claim of the Licensed Patent Rights that is directed to the Field without the prior written approval of [***].

[***]

8.4 Costs and Recoveries. All costs of any action by either Party to enforce, or to defend against a challenge to, the Licensed Patent Rights shall be borne by such Party, which shall keep any sums recovered or obtained in connection therewith (whether as damages, reasonable royalties, license fees, or otherwise in judgment or settlement derived therefrom) [***].

ARTICLE 9 - CONFIDENTIALITY

9.1 Use of Confidential Information. Each Party agrees that Confidential Information of the other Party disclosed to it or to its employees under this Agreement shall, for a period of [***] years after expiration or termination of this

Agreement (a) be used only in connection with the legitimate purposes of this Agreement; (b) be disclosed only to those persons set forth in Section 9.3; (c) be safeguarded with the same care normally afforded confidential information in the possession, custody or control of the Party holding the Confidential Information but no less than reasonable; and (d) not be disclosed, divulged, or otherwise communicated except with the express written consent of the Disclosing Party, except as set forth below.

9.2 Exceptions. Confidential Information will not include any information that the Receiving Party can document by competent evidence (a) is or becomes generally known to the public without violation of this Agreement by the Receiving Party or its Representatives; (b) is in the rightful possession of the Receiving Party without breach of any confidentiality obligations at the time of disclosure by the Disclosing Party to the Receiving Party; (c) is obtained by the Receiving Party from a Third Party without an accompanying duty of confidentiality and without a breach of such Third Party's obligations of confidentiality; and/or (d) is independently developed by the Receiving Party without use of the Disclosing Party's Confidential Information.

9.3 Non-Disclosure and Non-Use Obligations. The Receiving Party will restrict the possession, knowledge, and use of Confidential Information to its directors, officers, employees, advisers and consultants, potential and existing investors in the Receiving Party (including potential purchasers of milestones and royalties due MSK), potential and existing sublicensees and Affiliates of LICENSEE, and entities Controlled by the Receiving Party who (a) have a need to know the Confidential Information for the benefit or potential benefit of the Receiving Party; (b) are informed of the confidential nature of the Confidential Information; and (c) have obligations with respect to the Confidential Information that are consistent with this Agreement (collectively, "Representatives"). The Receiving Party shall be responsible for its Representatives' compliance with this Agreement. The Receiving Party and its Representatives shall not, except as otherwise agreed herein or as permitted by applicable laws (i) disclose any Confidential Information of the Disclosing Party to Third Parties; (ii) use any Confidential Information of the Disclosing Party except as is necessary to perform the Receiving Party's obligations under this Agreement; nor (iii) reverse engineer, disassemble, or decompile any prototypes, software, samples, or other tangible objects that embody the Disclosing Party's Confidential Information and that are provided to the Receiving Party under this Agreement.

9.4 Maintenance of Confidentiality. The Receiving Party and its Representatives shall (a) take reasonable measures to protect the secrecy of, and avoid disclosure and unauthorized use of, the Confidential Information of the Disclosing Party; without limiting the foregoing, the Receiving Party shall take at least those measures that it employs to protect its own confidential information of a similar nature; (b) not make any copies of the Confidential Information of the Disclosing Party except as needed for the performance of the Receiving Party's obligations or the exercise of the Receiving Party's rights under this Agreement or as otherwise approved in writing by the Disclosing Party; and (c) reproduce the Disclosing Party's confidential rights notices on any such authorized copies in the same manner in which such notices were set forth in or on the original. The Receiving Party shall promptly notify the Disclosing Party of any unauthorized use or disclosure, or suspected unauthorized use or disclosure, of the Disclosing Party's Confidential Information of which the Receiving Party or its Representatives become aware. Each Party will be responsible for any breach of this Agreement by its Representatives.

9.5 Export Restrictions. The Receiving Party agrees not to export or re-export any Confidential Information or product thereof in violation of U.S. or other export control laws or regulations.

9.6 Compelled Disclosure. In the event the Receiving Party is legally required to disclose Confidential Information of the Disclosing Party by judicial or governmental order, or in a judicial or governmental proceeding ("Compelled Disclosure"), the Receiving Party shall (a) give the Disclosing Party prompt notice of such Compelled Disclosure, prior to complying with such Compelled Disclosure to the extent legally permissible; (b) cooperate with the Disclosing Party in the event that it elects to contest such Compelled Disclosure or seek a protective order with respect thereto; and (c) in any event only disclose the exact Confidential Information or portion thereof specifically requested by the Compelled Disclosure.

9.7 Remedies. The Receiving Party agrees that any violation of this Article 9 may cause irreparable injury to the Disclosing Party, entitling the Disclosing Party to seek injunctive relief in addition to all other legal remedies.

9.8 Confidential Terms of this Agreement. Each Party shall treat the terms of this Agreement as the Confidential Information of the other Party. Notwithstanding anything to the contrary, however, each Party may disclose the terms

of this Agreement to its Representatives, to actual or potential investors or as part of a Change of Control process, and, in the case of LICENSEE, to its actual or potential Sublicensees; subject to the restrictions set forth in this Article 9.

ARTICLE 10 - REPRESENTATIONS. WARRANTIES, AND COVENANTS

10.1 General Representations and Warranties. Each Party represents and warrants to the other that (a) it is duly organized and validly existing under the applicable laws of the jurisdiction of its incorporation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof; (b) it is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder and the person executing this Agreement on its behalf has been duly authorized to do so by all requisite corporate action; (c) this Agreement is legally binding upon it and enforceable in accordance with its terms, and the execution, delivery, and performance of this Agreement by it does not conflict with any agreement, instrument, or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any applicable laws; and (d) it is not aware of any action, suit, or inquiry or investigation instituted by any entity which questions or threatens the validity of this Agreement.

10.2 MSK Representations, Warranties, and Covenants. [***]

ARTICLE 11 - INDEMNIFICATIONS: INSURANCE

11.1 Indemnification by LICENSEE. LICENSEE and its Affiliates shall indemnify, defend and hold harmless MSK, TDI, their respective Affiliates, and their respective trustees, directors, officers, medical and professional staff, employees, and students, and their respective successors, heirs, and assigns (each an "MSK Indemnitee"), against all claims and expenses (including legal expenses and reasonable attorneys' fees) arising out of [***]; provided, however, that LICENSEE will not be obligated to indemnify, defend, and hold harmless any MSK Indemnitee against any Claim to the extent it arises out of, results from, or is increased by MSK's willful misconduct or gross negligence. MSK will give notice to LICENSEE of any Claims that might be covered by this Section 11.1 and LICENSEE will have the right to defend the same, including selection of counsel reasonably acceptable to MSK (such approval to not be unreasonably withheld), and control of the proceedings; provided that LICENSEE will not, without the written consent of the MSK Indemnitee, settle or consent to the entry of any judgment with respect to Claims (a) that do not release the MSK Indemnitee from all liability with respect to such Claims, or (b) that may materially adversely affect the MSK Indemnitee or under which the MSK Indemnitee would incur any obligation or liability, other than one as to which LICENSEE has an indemnity obligation hereunder. MSK agrees to cooperate and provide reasonable assistance to such defense at LICENSEE's expense. MSK at all times reserves the right to select and retain separate counsel at its own expense to further defend MSK's interests.

11.2 LICENSEE Insurance. During the Term of this Agreement, LICENSEE shall obtain and carry in full force and effect general liability insurance that shall protect LICENSEE and MSK in regard to events covered by Section 11.1. Such insurance shall be written by a reputable insurance company and shall list MSK as an additional insured. Upon written request, LICENSEE will provide MSK with a Certificate of Insurance, and LICENSEE will provide MSK with [***] calendar days' written notice prior to any cancellation of such insurance. The limits of such insurance shall not be less than [***] per occurrence with an annual aggregate of [***] for personal injury, death, or property damage.

11.3 Indemnification by MSK. MSK shall indemnify, defend and hold harmless (and cause its Affiliates to so indemnify, defend and hold harmless) LICENSEE, its Affiliates, and their respective directors, officers, and employees, and their respective successors, heirs, and assigns (each a "LICENSEE Indemnitee"), against all Claims by a Third Party to the extent arising from [***]; provided, however, that MSK will not be obligated to indemnify, defend, and hold harmless any LICENSEE Indemnitee against any Claim to the extent it arises out of, results from, or is increased by LICENSEE's willful misconduct or gross negligence. LICENSEE will give notice to MSK of any Claims that might be covered by this Section 11.3 and MSK will have the right to defend the same, including selection of counsel reasonably acceptable to LICENSEE (such approval to not be unreasonably withheld) and control of the proceedings; provided that MSK will not, without the written consent of the LICENSEE Indemnitee, settle or consent to the entry of any judgment with respect to Claims (a) that do not release the LICENSEE Indemnitee from all liability with respect to such Claims, or (b) that may materially adversely affect the LICENSEE Indemnitee or under which the LICENSEE Indemnitee would incur any obligation or liability, other than one as to which MSK has an indemnity

obligation hereunder. LICENSEE agrees to cooperate and provide reasonable assistance to such defense at MSK's expense. LICENSEE at all times reserves the right to select and retain separate counsel at its own expense to further defend LICENSEE's interests.

ARTICLE 12 - DISCLAIMER OF WARRANTIES: LIMITATION OF DAMAGES

12.1 Disclaimer of Warranties. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, MSK MAKES NO REPRESENTATIONS, NO WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, VALIDITY OF LICENSED RIGHTS, VALIDITY OF LICENSED PATENT RIGHT CLAIMS ISSUED OR PENDING, OR THAT THE MANUFACTURE, SALE, OR USE OF THE LICENSED PRODUCTS WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS.

12.2 Limitation of Damages. [***]

ARTICLE 13 - COMPLIANCE WITH LAW

13.1 Export of Technical Data. It is understood that each Party may be subject to U.S. laws and regulations controlling the export of technical data, computer software, laboratory prototypes, and other commodities (including the Arms Export Control Act, as amended and the Export Administration Act of 1979), and that its obligations hereunder are contingent on compliance with applicable U.S. export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the U.S. Government and/or written assurances by the other Party that the other Party shall not export data or commodities to certain foreign countries without prior approval of such agency. Neither Party represents to the other Party that a license shall not be required nor that, if required, it shall be issued.

13.2 Compliance with Applicable Laws. LICENSEE and its Affiliates shall comply, and shall contractually require Sublicensees to comply, with all applicable laws in connection with their respective use of the Licensed Rights and sale of Licensed Products. MSK shall comply, and shall cause its Affiliates to comply, with all applicable laws in connection with their respective exercise of MSK's reserved rights under Section 2.2 or MSK's publication rights under Section 14.1.

13.3 Marking of Licensed Products. To the extent required by law, or if the failure to mark would reduce the rights of MSK or LICENSEE to enforce the Licensed Patent Rights against Third-Party infringers, LICENSEE shall mark, and shall contractually require its Affiliates and Sublicensees to mark, any Licensed Products with the appropriate Licensed Patent Rights.

ARTICLE 14 - PUBLICATION: PRESS RELEASES: NON-USE OF NAMES

14.1 Publication. [***]

14.2 Press Releases. On or after the Effective Date of this Agreement, LICENSEE may issue a press release in the form set forth on Exhibit E attached hereto. Any additional information that a Party proposes to present or issue specifically regarding this Agreement shall be provided to the other Party at least [***] business days in advance of the planned disclosure; provided, however, that LICENSEE may issue periodic public updates on its research, development, and commercialization of Licensed Products without review by MSK. Additionally, either Party may disclose the name of the other Party and the existence of this Agreement as required by law or by a governmental agency (including, but not limited to, securities and regulatory filings).

14.3 Non-Use of Names. Except as set forth above, neither Party shall use the name, trademarks, or logos of the other Party nor of any of their employees in any press release, advertising, or promotional or sales literature without prior written consent of the other Party.

ARTICLE 15 - ASSIGNMENT

Neither Party may assign or delegate any or all of its rights or obligations under this Agreement, or transfer this Agreement, without the prior written consent of the other Party, except that (a) MSK shall have the right to assign any of its rights, delegate any of its obligations, or transfer this Agreement without such consent (i) to an Affiliate, or (ii) as part of a Change of Control; (b) LICENSEE shall have the right to assign any of its rights, delegate any of its obligations, or transfer this Agreement without such consent (i) to an Affiliate, or (ii) as part of a Change of Control; and (c) MSK may without consent of LICENSEE freely assign all or any portion of the payments due under this Agreement to a Third Party. Any assignment by a Party shall bind its assignee to all provisions of this Agreement. Furthermore, the covenant not to sue set forth in Section 2.3 shall be transferable to and for the benefit of an assignee of this Agreement by LICENSEE upon assignment of this Agreement as permitted under this Article 15 and shall be binding with respect to any assignee of LICENSEE upon assignment of this Agreement by LICENSEE permitted under this Article 15. Any assignment, delegation, or transfer by any Party in violation of this Article 15 shall be void and of no effect.

ARTICLE 16 - TERMINATION

16.1 Termination by LICENSEE. (a) LICENSEE may terminate this Agreement upon ninety (90) calendar days' prior notice to MSK. Following termination under this Section 16.1, LICENSEE and its Affiliates shall not (i) exploit the Licensed Rights, or (ii) make, have made, sell, offer to sell, use, export, or import any product that would be a Licensed Product but for LICENSEE's termination under this Section 16.1. (b) If LICENSEE is in material breach of this Agreement at the time it gives notice of termination under this Section 16.1, or if the dispute resolution process of Section 18.10 has commenced at the time of such notice, a termination by LICENSEE under this Section 16.1 shall not divest MSK of any rights or remedies that it may have against LICENSEE on account of LICENSEE's breach.

16.2 Bankruptcy or Cessation of Business. MSK may terminate this Agreement upon written notice to LICENSEE if (a) a petition in bankruptcy is filed against LICENSEE and is consented to, acquiesced in or remains undismissed for [***]; (b) LICENSEE makes a general assignment for the benefit of creditors, or a receiver is appointed for LICENSEE, and LICENSEE does not return to solvency before the expiration of a [***] period; or (c) LICENSEE makes a filing with a governmental agency that LICENSEE has ceased to do business.

16.3 Nonpayment. If LICENSEE fails to pay MSK any payments under Article 5 or Section 7.1, and such payments remain past due for more than [***] MSK shall have the right to terminate this Agreement after an additional [***] written notice, unless LICENSEE pays to MSK within the [***] notice period, all payments past due together with any interest due. A dispute concerning LICENSEE's payment obligations shall be subject to the dispute resolution procedure of Section 18.10.

16.4 Criminal Activity. MSK may terminate this Agreement upon immediate written notice to LICENSEE if LICENSEE is convicted in a final judgment that cannot be appealed of a felony relating to the manufacture, use, or sale of Licensed Products in any jurisdiction where LICENSEE manufactures, uses, or sells Licensed Products.

16.5 Breach. (a) In addition to any other termination right specified in this Agreement, either Party may terminate this Agreement upon [***] written notice to the other Party, if the other Party materially breaches a provision of this Agreement, unless the other Party cures any such breach prior to the expiration of the [***] period. (b) In the event MSK materially breaches (i) Section 2.1 by granting a license of the Licensed Rights to a Third Party in the Field, [***], LICENSEE may, as an alternative to terminating this Agreement, maintain this Agreement; provided, however that during the period of an uncured Major Breach by MSK, MSK shall not be eligible for any Success Payment Amounts or Change of Control Payment. If LICENSEE chooses to maintain this Agreement during the period of an uncured Major Breach by MSK, LICENSEE will so notify MSK within [***] [***] after the [***] period set forth in Section 16.5(a). If and when MSK cures the Major Breach, MSK shall be eligible for any future Success Payment Amounts or Change of Control Payment from the date of cure of the Major Breach to the end of the Time Interval (which shall not be extended).

16.6 Success Payment Amounts; Change of Control Payment. (a) LICENSEE's obligation to pay the Success Payment Amounts and the Change of Control Payment set forth in Section 5.1(g) and Exhibit D shall terminate immediately following the closing of a Change of Control of LICENSEE, with the sole exception of any Success

Payment Amount or a Change of Control Payment that is due and payable to MSK as a result of such Change of Control. (b) The Success Payment Amounts and the Change of Control Payment will not survive in the event that LICENSEE terminates this Agreement pursuant to Section 16.1(a), except under the circumstances set forth in Section 16.1(b) and only if LICENSEE has no Sublicensees at the time of termination.

16.7 Accrued Obligations. Expiration or termination of this Agreement for any reason shall not release LICENSEE from any obligation or liability that, at the time of such expiration or termination, has already accrued to MSK or which is attributable to a period prior to such expiration or termination; specifically any accrued payments due to MSK by LICENSEE under Sections 5.1(b) through 5.1(g) (and Sections 5.3 and 5.4, as applicable); Section 6.2; and Section 7.1(b).

16.8 Effect on Sublicensees. [***]

16.9 Survival. Upon any expiration or termination of this Agreement, the following Articles, Sections and Exhibits of this Agreement shall survive: the applicable DEFINITIONS in Article 1; Articles 9 (CONFIDENTIALITY); 11 (INDEMNIFICATIONS; INSURANCE); 12 (DISCLAIMER OF WARRANTIES; LIMITATION OF DAMAGES); 17 (NOTICES AND OTHER COMMUNICATIONS); and 18 (MISCELLANEOUS PROVISIONS); Sections 6.1 (Books and Records); 16.6 and Exhibit D (Success Payment Amounts; Change of Control Payment), unless expressly terminated by LICENSEE under Section 16.1(a) or under Section 16.5; 16.7 (Accrued Obligations); and 16.9 (Survival).

ARTICLE 17 - NOTICES AND OTHER COMMUNICATIONS

Except for payments, any notice, request, delivery, approval, or consent required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been sufficiently given if delivered in person, transmitted by facsimile or electronic mail (receipt verified) or by express courier service (signature required), or five (5) business days after it was sent by registered letter, return receipt requested (or its equivalent), to the Party to which it is directed at its address shown below or such other address as provided in writing by one Party to the other Party.

In the case of MSK:

[***]

In the case of LICENSEE:

[***]

ARTICLE 18 - MISCELLANEOUS PROVISIONS

18.1 Governing Law. This Agreement shall be construed, governed, interpreted, and applied in accordance with the laws of the State of New York, without giving effect to any choice or conflict of law principles, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent was filed or granted.

18.2 Jurisdiction. The state and federal courts located in the State of [***] with jurisdiction in [***] shall have exclusive jurisdiction of any claims or actions between the Parties, their successors and assigns, arising out of or relating to this Agreement, and each Party, their successors and assigns consents to venue and personal jurisdiction of those courts for the purpose of resolving any such disputes.

18.3 Severability. Except to the extent a provision is stated to be essential, or otherwise to the contrary, the provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

18.4 Waiver. The failure of either Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other Party.

18.5 Counterparts. This Agreement may be executed in any number of counterparts, including scanned PDF documents or electronic signatures, and each of such counterparts shall for all purposes be an original and all such counterparts shall together constitute but one and the same agreement.

18.6 Entire Agreement: Amendments. This Agreement, including Exhibits A, B, C, D, E, and F (which exhibits are incorporated herein by reference), constitutes the entire understanding between the Parties with respect to the subject matter hereof, and supersedes any and all prior and contemporaneous negotiations, representations, agreements, term sheets, and understandings, written or oral, that the Parties may have reached with respect to the subject matter hereof, including but not limited to [***]. This Agreement may only be modified or supplemented in a writing expressly stated for such purpose and signed by authorized representatives of the Parties.

18.7 No Reliance. Each Party hereby acknowledges that in executing this Agreement it is not relying on and has not relied on any representation or statement by the other Party, other than statements contained in this Agreement.

18.8 Relationship between the Parties. The relationship between the Parties under this Agreement is that of independent contractors. Nothing contained in this Agreement shall be construed to create a partnership, joint venture, or agency relationship between the Parties. No Party is a legal representative of any other Party, and no Party can assume or create any obligation, liability, representation, warranty, or guarantee, express or implied, on behalf of the other Party for any purpose whatsoever.

18.9 Force Majeure. With the exception of payment of amounts due under Article 5, in the event either Party hereto is prevented from or delayed in the performance of any of its obligations hereunder, other than the obligation to pay money, by reason of acts of God, wars, strikes, civil unrest and riots, storms and other weather phenomena, fires, earthquakes, epidemics, pandemics, power shortages or failures, failures of transportation or other governmental systems, postal and courier delays, and the like, the Party so prevented or delayed shall be excused from the performance of any such obligation for the period during which its performance is prevented by the force majeure event. The Party affected by such force majeure shall provide the other Party with full particulars thereof as soon as it becomes aware of the same (including its best estimate of the likely extent and duration of the interference with its activities), and shall use Commercially Reasonable Efforts to overcome the difficulties created thereby and to resume performance of its obligations as soon as practicable.

18.10 Dispute Resolution. [***]

IN WITNESS WHEREOF, an authorized representative of each Party has signed and dated this Exclusive License Agreement below.

CARIBOU BIOSCIENCES, INC.	MEMORIAL SLOAN KETTERING CANCER CENTER
By: /s/ Rachel E. Haurwitz	By: /s/ Gregory S. Raskin
Rachel E. Haurwitz, Ph.D. President & CEO	Gregory S. Raskin Vice President Technology Development
Date: November 13, 2020	Date: November 13, 2020

Exhibit A
Licensed Know-How

[***]

Exhibit B
Licensed Materials

[***]

Exhibit C
Licensed Patent Rights

[***]

Exhibit D

Success Payment Amounts; Change of Control Payment

Success Payment Amounts

1. Initial Share Price Multiples Giving Rise to Success Payment Amounts. The Success Payment Amounts (as defined herein) shall be paid by LICENSEE upon LICENSEE achieving a Subsequent Company Share Value (as defined herein) during the Time Interval (as defined in Section 5.1(g) of this Exclusive License Agreement) greater than or equal to the following multiples of the Initial Share Price (as defined herein) determined as set forth in Section 4 of this Exhibit D. The amount (the "Success Payment Amounts") LICENSEE shall be obligated to pay to MSK upon achieving a Subsequent Company Share Value equal to each such multiple of the Initial Share Price are set forth in the following table:

Multiple of Initial Share Price that gives rise to a Success Payment Amount:	5X	10X	15X
Success Payment Amounts payable to MSK:	5X multiple Success Payment Amount: $10,000,000	10X multiple Success Payment Amount: $10,000,000	15X multiple Success Payment Amount: $15,000,000

The aggregate Success Payment Amounts and Change of Control Payment paid by LICENSEE to MSK shall in no event exceed Thirty-Five Million U.S. Dollars ($35,000,000).

[***]

2. Definitions.

(a) "Calculation Event" means a Qualified Equity Financing, a Qualified Debt Financing, a Change of Control, or an IPO.

(b) "Change of Control" means, for purposes of this Exhibit D only, a Change of Control of LICENSEE and shall not include any merger or consolidation involving LICENSEE or a subsidiary of LICENSEE in which the shares of capital stock of LICENSEE outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least [***], by voting power, of the capital stock of (1) the surviving or resulting corporation, or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation.

(c) "Qualified Equity Financing" means a Private Financing where LICENSEE sells preferred stock or common stock of LICENSEE.

(d) "Qualified Debt Financing" means a Private Financing where LICENSEE sells debt securities convertible into LICENSEE's preferred stock or common stock at a fixed price determinable on the date of issuance. For the avoidance of doubt, the issuance of any debt security containing a valuation cap or other similar discount mechanism that is only applicable to a future valuation or price per share after the issuance date of such debt security shall not be considered a Qualified Debt Financing.

(e) "Initial Share Price" is $9.4379 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization).

(f) "IPO" means LICENSEE's first sale of shares of LICENSEE's common stock to the public in a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended.

(g) "Private Financing" means a transaction or series of related transactions for capital raising purposes yielding gross proceeds to LICENSEE of at least [***]. For purposes of clarification, a Private Financing shall not include the issuance of any shares (i) to LICENSEE's service providers, (ii) to banks, equipment lessors, or other financial institutions or to real property lessors, pursuant to a debt financing (other than a Qualified Debt Financing), equipment

leasing, or real property transaction, (iii) pursuant to LICENSEE's acquisition of another entity by merger, purchase of substantially all of the assets of another entity, or other reorganization pursuant to a joint venture agreement, (iv) in connection with sponsored research, collaboration, technology/intellectual property licensing, development, marketing, or other similar arrangements or strategic partnerships, or (v) pursuant to any settlement of any action, suit, proceeding, or litigation.

(h) "Subsequent Company Share Value Certificate" means a certificate in the form set forth on Annex 1 attached hereto, issued by LICENSEE, setting forth and certifying the Subsequent Company Share Value calculated pursuant to Section 3 of this Exhibit D.

(i) "45-Day VWAP" means the volume weighted average trading price of LICENSEE's common stock over the forty-five (45) trading day period immediately preceding the date of determination.

3. "Subsequent Company Share Value" shall be a per share value determined as follows:

(a) Prior to the IPO. Prior to the IPO, the Subsequent Company Share Value shall be determined at the closing of a Qualified Equity Financing or a Qualified Debt Financing.

(i) Qualified Equity Financing. In the case of a Qualified Equity Financing, the Subsequent Company Share Value shall be equal to the lowest per share cash purchase price of LICENSEE's preferred stock or common stock, as the case may be, sold in such Qualified Equity Financing.

(ii) Qualified Debt Financing. In the case of a Qualified Debt Financing, the Subsequent Company Share Value shall be equal to the fixed, per share conversion price of the debt securities sold in such Qualified Debt Financing determinable on the closing date of such Qualified Debt Financing.

(b) At the IPO. At the IPO, the Subsequent Company Share Value shall be equal to the initial public offering price.

(c) After the IPO. At all times following the date that is forty-five (45) trading days after the IPO, except at the closing of a Change of Control, the Subsequent Share Value shall be equal to the 45-Day VWAP.

(d) At a Change of Control. In the case of a Change of Control, the Subsequent Company Share Value shall be equal to the lowest amount per share of the proceeds distributed solely at the closing of such Change of Control to the holder of a share of LICENSEE's Series B Preferred Stock (or, as applicable, a share of LICENSEE's common stock issued upon conversion of such share of Series B Preferred Stock). The amount deemed paid or distributed to the holders of shares of LICENSEE's Series B Preferred Stock (or, as applicable, shares of LICENSEE's common stock issued upon conversion of such shares of Series B Preferred Stock) upon any such Change of Control shall be the cash plus the value of the property, rights, or securities paid or distributed to such holders by LICENSEE or acquiring person, firm, or other entity at the closing of such Change of Control. The value of such property, rights, or securities shall be determined in good faith by the Board of Directors of LICENSEE. For purposes of clarification, the Subsequent Company Share Value calculated pursuant to the preceding sentence shall not include proceeds from potential earn-outs, release of holdbacks/escrow amounts, contingent value rights, or similar contingent distributions.

(e) All per share values referenced in this Exhibit D including but not limited to the Subsequent Company Share Value are subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalizations.

4. Determination of Subsequent Company Share Value; Timing. The Subsequent Company Share Value shall be determined each time a Calculation Event occurs and at all times following the date that is forty-five (45) trading days after the IPO as described in Section 3(c) of this Exhibit D. For clarity, payment to MSK of a previous Success Payment Amount shall not relieve LICENSEE's obligations to make a Success Payment Amount in connection with any subsequent increases in the Subsequent Company Share Value subject to the aggregate maximum of Thirty-Five Million U.S. Dollars ($35,000,000).

5. Notices and Evidence of Subsequent Company Share Value.

(a) Notice. LICENSEE shall provide MSK with a Subsequent Company Share Value Certificate no later than [***] following the occurrence of a Calculation Event. In the case of the VWAP Notice (as defined herein), MSK shall provide LICENSEE with such VWAP Notice no later than [***] following the forty-fifth (45') trading day of the forty-five (45) trading day time period that MSK used to determine the 45-Day VWAP Value.

(b) Evidence of Subsequent Company Share Value.

(i) Prior to the IPO. Prior to the IPO and in the case of either a Qualified Equity Financing or a Qualified Debt Financing, in addition to the Subsequent Company Share Value Certificate provided pursuant to Section 5(a) herein, LICENSEE shall provide a redacted copy of the executed stock purchase agreement or convertible promissory note, as the case may be, for such Qualified Equity Financing or Qualified Debt Financing reflecting the per share cash purchase price or prices or conversion price of LICENSEE's securities sold in such Qualified Equity Financing or Qualified Debt Financing. The redactions of the executed stock purchase agreement or convertible promissory note shall include, without limitation, the names and any other identifying information of the purchasers, the schedule of purchasers, exhibits, signature pages, and any representations and warranties made by LICENSEE. The Subsequent Company Share Value set forth in the applicable Subsequent Company Share Value Certificate shall be the final value used for determining the applicable Success Payment Amount.

(ii) Upon the IPO. For the IPO, the Subsequent Company Share Value set forth in the applicable Subsequent Company Share Value Certificate shall be the final value used for determining the applicable Success Payment Amount.

(iii) Change of Control. In the event of a Change of Control, the Subsequent Company Share Value set forth in the applicable Subsequent Company Share Value Certificate shall be the final value used for determining the applicable Success Payment Amount.

(iv) After the IPO. In the event MSK determines that a Success Payment Amount is due at any time following the date that is forty-five (45) trading days after the IPO, MSK shall provide LICENSEE with written notice in a timely manner as set forth in Section 5(a) of this Exhibit D containing MSK's calculation of the 45-Day VWAP (such value, the "45-Day VWAP Value") giving rise to the applicable Success Payment Amount obligation (the "VWAP Notice"), and, unless LICENSEE disputes the calculations contained in the VWAP Notice in writing within [***] following LICENSEE's receipt of the VWAP Notice (a "Dispute Notice"), the calculation of the 45-Day VWAP Value set forth in the VWAP Notice shall constitute the Subsequent Company Share Value. [***]. For purposes of clarification, LICENSEE shall have no obligation to monitor the 45-Day VWAP or provide MSK any notice in the event that a Success Payment Amount has arisen or may have arisen due to the 45-Day VWAP.

6. Form of Payments; Timing of Payments.

(a) Form of Payment. LICENSEE shall have the option to pay a Success Payment Amount to MSK in cash or, subject to applicable securities laws, in shares of LICENSEE's common stock having a value equivalent to such Success Payment Amount (as determined below).

(i) Stock Payment. If LICENSEE elects to pay a Success Payment Amount in shares of LICENSEE's common stock, the number of shares of LICENSEE's common stock to be issued to MSK shall be calculated using a price per share equal to (i) if the Success Payment Amount is due as a result of a Qualified Equity Financing, a Qualified Debt Financing, or an IPO, the Subsequent Company Share Value in such case giving rise to the obligation to pay such Success Payment Amount, or (ii) if the Success Payment Amount is due following the date that is forty-five (45) trading days after the IPO, the 45-Day VWAP Value set forth in the VWAP Notice. Shares of common stock issued by LICENSEE to MSK pursuant to this Section 6(a)(i) shall be subject to a subscription agreement in substantially the form set forth as Exhibit F to the Exclusive License Agreement. LICENSEE shall have no obligation to register such shares for resale but shall use commercially reasonable efforts to assist with any legend removal as soon as lawful, subject to compliance with applicable securities laws.

(b) Timing of Payments.

(i) Cash Payment Prior to the IPO or at the IPO. Prior to the IPO or at the IPO, if LICENSEE elects to pay a Success Payment Amount in cash, such payment shall occur within [***] after the occurrence of the Calculation Event giving rise to such Success Payment Amount.

(ii) Cash Payment After the IPO. Following the IPO, if LICENSEE elects to pay a Success Payment Amount in cash, such payment shall occur within [***] after receipt of the VWAP Notice [***] or, in the case of a Success Payment Amount that has arisen as a result of a Change of Control, within [***] after the occurrence of such Change of Control.

(iii) Stock Payment. Subject to applicable securities laws, payment of a Success Payment Amount in shares of LICENSEE's common stock shall occur within [***] after the occurrence of the Calculation Event giving rise to such Success Payment Amount or receipt of a VWAP Notice [***] as the case may be.

Change of Control Payment

1. Change of Control Payment. If, during the Time Interval, there is a Change of Control of LICENSEE, in addition to any Success Payment Amounts that may be due as a result of such Change of Control, LICENSEE may have an obligation to pay to MSK an amount calculated in accordance with the following provisions (the "Change of Control Payment"); provided, however, that the sum of the Change of Control Payments and Success Payment Amounts paid to MSK shall not exceed Thirty-Five Million U.S. Dollars ($35,000,000):

[***]

2. Timing of Payment. The Change of Control Payment shall be due and payable within [***] [***] after the Change of Control occurs.

[***]

Exhibit E
LICENSEE Press Release

Caribou Biosciences Announces Licensing Agreement for scFvs Targeting CD371 to Enable Development of Allogeneic Cell Therapies

BERKELEY, CA - November [ ], 2020 - Caribou Biosciences, Inc., a leading clinical-stage CRISPR genome editing biotechnology company, announced today the execution of an exclusive license agreement with Memorial Sloan Kettering Cancer Center (MSK) under which Caribou has rights to fully human anti-CD371 scFvs and intellectual property related thereto in the field of allogeneic CD371-targeted cell therapies including CAR-T, CAR-NK, or iPSC-derived cell products. The anti-CD371 scFvs were developed in the laboratory of Renier Brentjens, M.D., Ph.D. at MSK in collaboration with the Tri-Institutional Therapeutic Discovery Institute (Tri-I TDI). Tri-I TDI is a non-profit drug discovery company wholly owned by MSK, Weill Cornell Medicine, and The Rockefeller University (www.tritdi.org). MSK has the sole responsibility for licensing these scFvs and the related intellectual property for commercialization.

“CD371, also known as CLL-1, is an attractive target for both acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS) due to its expression on these myeloid cancer cells, its enrichment in leukemic stem cells, and its absence on hematopoietic stem cells,” said Steven Kanner, Ph.D., Chief Scientific Officer of Caribou. “Preclinical studies at MSK have demonstrated the antitumor efficacy of targeting CD371 in AML using these human scFvs in CAR-Ts.”

In-licensing these anti-CD371 scFvs further expands Caribou’s pipeline of allogeneic cell therapies for hematological malignancies. CB-010, Caribou’s lead allogeneic CAR-T program, targets CD19 and has been cleared by the FDA for clinical evaluation. CB-011, Caribou’s second allogeneic CAR-T therapy, targets BCMA. Caribou’s next-generation genome editing technologies enable high efficiency and specificity multiplex engineering, which is critical for the manufacture of CB-010 and CB-011. Caribou implements multiple strategies to boost CAR-T cell persistence to overcome T cell exhaustion and prevent rapid immune-mediated clearance.

“The opportunity to exclusively access fully human CD371-specific antibody fragments is exciting and we look forward to utilizing them to develop allogeneic cell therapies to treat AML and/or MDS,” said Rachel Haurwitz, Ph.D., President and Chief Executive Officer of Caribou. “The combination of these scFvs and Caribou’s next-generation genome editing platform is a promising approach to addressing these difficult-to-treat myeloid malignancies with significant unmet medical need.”

The financial terms of the deal were not disclosed.

About Caribou Biosciences, Inc.

Caribou is a leading clinical-stage CRISPR genome editing biotechnology company founded by pioneers of CRISPR biology. The company is developing an internal pipeline of off-the-shelf genome-edited CAR-T and natural killer (NK) cell therapies.

For more information about Caribou, visit www.cariboubio.com and follow the Company @CaribouBio.

“Caribou Biosciences” and the Caribou logo are registered trademarks of Caribou Biosciences, Inc.

Required Memorial Sloan Kettering Cancer Center (MSK) Disclosure

As a result of the licensing agreement with Caribou described herein, MSK has institutional financial interests related to the licensed technologies and will be a Caribou stockholder. Researchers at MSK, including Dr. Brentjens, have rights to receive financial remuneration associated with the licensed intellectual property rights.

Caribou Biosciences Media Contact:

[name]
Ogilvy
[email]
[phone]

Exhibit F
Form of Subscription Agreement

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.3

CONFIDENTIAL

SALE AND ASSIGNMENT AGREEMENT

This Sale and Assignment Agreement (this "Agreement"), dated as of January 31, 2020 (the "Effective Date"), is by and between ProMab Biotechnologies, Inc., having an address at 2600 Hilltop Drive, Richmond, CA 94806 ("ProMab"), and Caribou Biosciences, Inc., having a place of business at 2929 7th Street, Suite 105, Berkeley, CA 94710 USA ("Caribou"). ProMab and Caribou are each referred to herein individually as a "Party" and collectively as the "Parties."

WHEREAS, [***]

WHEREAS, [***]

WHEREAS, [***]

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

ARTICLE 1
DEFINITIONS

As used in this Agreement, the following capitalized terms shall have the meanings indicated:

1.1 "Affiliate" means any corporation or other business entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with a Party, but only for so long as such corporation or entity controls, is controlled by, or is under common control with such Party. For purposes of this definition of an Affiliate, the term "control" means (a) the direct or indirect ownership of more than [***] of the stock having the right to vote for directors thereof, or (b) the ability to otherwise control the decisions of the board of directors or equivalent governing body thereof. Affiliates excludes any other portfolio companies of investors that have invested in a Party.

1.2 "Assigned Patent Rights" means those patent applications set forth on Exhibit A attached hereto as well as any continuations, divisionals, continuations-in-part, substitutions, registrations, reissues, reexaminations, confirmations, renewals, and extensions thereof, and any patents issuing therefrom; and foreign counterparts of any of the foregoing.

1.3 "Calendar Quarter" means four (4) periods of three (3) consecutive months each, wherein each period shall be a quarter and shall end March 31, June 30, September 30, and December 31.

1.4 "Calendar Year" means the time period from January 1 through December 31.

1.5 "Controlled" for purposes of Section 2.4 means that ProMab has the legal authority or right (whether by ownership, license, or otherwise) to grant to Caribou the covenant not to sue set forth in Section 2.4 without violating the terms of any agreement with any Third Party.

1.6 “Net Sales” means, with respect to any and all Products, gross invoiced amounts for Products sold by Caribou, its Affiliates, and any direct and indirect sublicensees thereof, to Third Parties, less applicable [***].

1.7 “PMC306” means the humanized scFv of the anti-B cell maturation antigen (BCMA) chimeric antigen receptor (CAR) designated by ProMab as PMC306 and defined by the Sequence.

1.8 “Product” means any product, the manufacture, use, sale, offer for sale, importation, or exportation of which would infringe a Valid Claim of the Assigned Patent Rights.

1.9 “Sequence” means the exact DNA and protein sequences of PMC306 as set forth on Exhibit B attached hereto and in the Assigned Patent Rights.

1.10 “Term” means from the Effective Date of this Agreement until the expiration, abandonment, or invalidation of the last patent within the Assigned Patent Rights.

1.11 “Third Party” means any person or entity other than ProMab or Caribou or an Affiliate of either Party.

1.12 ”Valid Claim” means a claim of an issued, unexpired, and in-force patent that has not been revoked or held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction (which decision is not appealable or has not been appealed within the time allowed for appeal), and which claim has not been disclaimed, denied, or admitted to be invalid or unenforceable through reissue, re-examination, supplemental examination, disclaimer, or otherwise. For the sake of clarity, patent application claims are not included within the definition of Valid Claim.

ARTICLE 2
ASSIGNMENTS

2.1 Assignment of PMC306. ProMab agrees to sell and assign, and hereby does sell and assign, to Caribou all rights, title, and interest in PMC306. No rights or interest of any kind in PMC306 are retained by ProMab.

2.2 Assignment of Patent Rights. ProMab agrees to sell and assign, and hereby does sell and assign, to Caribou all rights, title, and interest in the Assigned Patent Rights, including but not limited to enforcement rights and rights to future inventions or improvements derived from the Assigned Patent Rights. No rights or interest of any kind in the Assigned Patent Rights are retained by ProMab.

2.3 Acknowledgement by Caribou Regarding PMC306 and the Assigned Patent Rights. By entering into this Agreement, Caribou acknowledges that (a) ProMab has applied for both a provisional patent application (now expired) and a Patent Cooperation Treaty (PCT) application (currently pending) on PMC306 with the U.S. Patent and Trademark Office before the Effective Date of this Agreement; and (b) ProMab makes no representations, warranties, or covenants that patents will issue on the Assigned Patent Rights.

2.4 Covenant Not to Sue. Additionally, ProMab hereby covenants not to sue Caribou, its Affiliates, and any direct and indirect sublicensees thereof during the Term in the event that a Product or the use, manufacture, sale, offer for sale, importation, or exportation thereof infringes any intellectual property Controlled by ProMab. This covenant not to sue shall be transferable to and for the benefit of an assignee of this Agreement by Caribou upon assignment of this Agreement as set forth in Section 9.2 and shall be binding with respect to any assignee of ProMab upon assignment of this Agreement by ProMab as set forth in Section 9.2.

ARTICLE 3
PAYMENTS AND REPORTS

3.1 Initial Assignment Fee. Caribou shall pay to ProMab a one-time, non-refundable initial assignment fee of Four Hundred Twenty-Five Thousand U.S. Dollars ($425,000.00) within [***] calendar days of the Effective Date of this Agreement. Within [***] business days after the Effective Date of this Agreement, ProMab shall provide Caribou with wire instructions for payments due by Caribou to ProMab under this Agreement.

3.2 Royalties.

[***]

[***]	[***]
[***]	[***]
[***]	[***]

[***]

(a) Royalty Reductions. Caribou may reduce the royalties owed to ProMab under Section 3.2(a) during any Calendar Quarter and in any country in which Caribou is required to pay royalties to a Third Party for intellectual property covering a Product by the amount of such Third- Party royalties; provided, however, that in no event will the royalties owed by Caribou to ProMab be reduced by more than fifty percent (50%) of the royalties set forth in Section 3.2(a).

3.3 Calendar Quarter Reports. Within [***] calendar days after the end of each Calendar Quarter during the Term, Caribou shall deliver to ProMab (a) a detailed report specifying in the aggregate (i) total invoiced amounts to Third Parties for Products by Caribou, its Affiliates, and any direct and indirect sublicensees thereof; and (ii) amounts deducted by category (as defined in Section 1.6) from gross invoiced amounts to calculate Net Sales of Products; and (b) payment of royalties due.

3.4 Method of Payment. All payments due under this Agreement shall be made in U.S. dollars and shall be made by bank wire transfer in immediately available funds pursuant to ProMab’s wire instructions.

3.5 Tax Withholding. Each Party shall be responsible for its own taxes due under this Agreement.

3.6 Books and Records. Caribou shall keep accurate books and records relating to the sale of Products, as used in the calculation of Calendar Quarter reports under Section 3.3. Caribou shall permit ProMab, by

independent qualified public accountants engaged by ProMab and reasonably acceptable to Caribou, to examine Caribou's books and records at any reasonable time upon [***] calendar days' prior written notice, but not later than [***] years following the rendering of any Calendar Quarter report. The foregoing right of review may be exercised by ProMab only once during each Calendar Year and may be exercised only once with respect to any records provided for a particular Calendar Quarter. The results of any such examination and review will be shared with Caribou within [***] business days after receipt thereof by ProMab. ProMab shall bear the cost of any such examination and review; provided that if the inspection and audit shows an underpayment of amounts payable hereunder of more than [***] of the amount due for the applicable Calendar Quarter, then Caribou shall reimburse ProMab within [***] calendar days of receipt of an invoice for all reasonable costs incurred in connection with such examination. Caribou shall pay to ProMab the amount of any underpayment revealed by such examination, in addition to interest owed from the date(s) such underpayment(s) were due, within [***] calendar days of receipt of an invoice from ProMab for such underpayment and interest; and ProMab shall pay to Caribou the amount of any overpayment revealed by such examination within [***] calendar days of receipt of an invoice from Caribou for such overpayment.

3.7 Interest on Late Payments. Any payments or portions thereof due hereunder which are not paid when due shall bear interest equal to the lesser of the rate equal to prime rate effective for the date that payment was due, as published by *The Wall Street Journal, U.S., Internet Edition*, plus an additional [***], or the maximum rate permitted by applicable laws, calculated on the number of calendar days such payment is delinquent.

ARTICLE 4
RESPONSIBILITIES

4.1 Responsibility for Assigned Patent Rights and Infringement Thereof. Caribou shall have the sole responsibility, at its discretion, for filing, prosecuting, maintaining, and enforcing the Assigned Patent Rights and for all costs and decisions relating thereto. Caribou shall have the sole right, at its discretion and costs, to institute and conduct legal action against Third-Party infringers of the Assigned Patent Rights and/or defend any declaratory judgments with respect to the Assigned Patent Rights and to receive any recovery or settlement in connection with such legal action.

4.2 Cooperation and Assistance. ProMab agrees and covenants that it will provide all relevant assistance to Caribou in perfecting title to the Assigned Patent Rights (including, but not limited to, signing assignment documents) and in filing, prosecuting, and defending the Assigned Patent Rights; provided, however, that Caribou shall reimburse ProMab for its out-of-pocket costs in providing such assistance.

4.3 Responsibility for Products. Caribou shall have the sole control, responsibility, and authority for developing, manufacturing, filing for and obtaining all necessary regulatory approvals, and commercialization of Products; provided, however, that nothing in this Agreement shall impose any obligation on Caribou to develop or commercialize Products and Caribou may discontinue developing or commercializing such Products at its sole discretion at any time; provided, however, that Caribou shall provide written notice to ProMab of such discontinuation and shall remain responsible for any Calendar Quarter reports under Section 3.3 and associated royalty payments (if any) due to ProMab under Section 3.2 based on sales (if any) that occurred prior to such discontinuation.

ARTICLE 5
REPRESENTATIONS, WARRANTIES, AND COVENANTS

5.1 Representations and Warranties. Each Party represents and warrants to the other that:

(a) it is duly organized and validly existing under the applicable laws of the jurisdiction of its incorporation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof; (b) it is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person executing this Agreement on its behalf has been duly authorized to do so by all requisite corporate action; (c) this Agreement is legally binding upon it and enforceable in accordance with its terms, and the execution, delivery, and performance of this Agreement by it does not conflict with any agreement, instrument, or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any applicable laws; and (d) it is not aware of any action, suit, or inquiry or investigation instituted by any entity which questions or threatens the validity of this Agreement.

5.2 Additional ProMab Representations and Warranties. [***]

5.3 Limitations. EXCEPT AS PROVIDED IN THIS ARTICLE 5, NEITHER PARTY MAKES ANY REPRESENTATIONS, WARRANTIES, OR CONDITIONS (EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE) WITH RESPECT TO THE SUBJECT MATTER HEREOF, AND EACH PARTY SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

[***]

ARTICLE 6
CONFIDENTIALITY

6.1 Definition. “Confidential Information” means all business and research information of a Party or its Affiliates (including, but not limited to, information about research, development, preclinical and clinical studies, regulatory affairs, intellectual property, operations, marketing, business plans, financial statements, biological materials, software, product specifications, data, know- how, and the like, whether tangible or intangible, and including all copies, abstracts, summaries, analyses, and other derivatives thereof) furnished by one Party (the “Disclosing Party”) to the other Party or its Affiliates (the “Receiving Party”) or to the Receiving Party’s directors, officers, employees or representatives, including, but not limited to, attorneys, accountants, consultants, and financial advisors who are under obligations of confidentiality at least as stringent as those set forth herein (collectively, “Representatives”) that: (a) is disclosed in writing or other tangible form and marked “Confidential,” “Proprietary,” or in some other manner to indicate its confidential nature; (b) is initially disclosed in oral or other intangible form and subsequently confirmed in writing within [***] calendar days after its initial disclosure; or (c) the nature of the information and the manner of disclosure are such that a reasonable person would understand it to be confidential. Calendar Quarter reports under Section 3.3 shall be Caribou Confidential Information.

6.2 Exceptions. Confidential Information will not include any information that the Receiving Party can document by competent evidence: (a) is or becomes generally known to the public without violation of this Agreement by the Receiving Party or its Representatives; (b) is in the rightful possession of the Receiving Party without confidentiality obligations at the time of disclosure by the Disclosing Party to the Receiving Party; (c) is obtained by the Receiving Party from a Third Party without an accompanying duty of confidentiality and without a breach of such Third Party's obligations of confidentiality; or (d) is independently developed by the Receiving Party without use of the Disclosing Party's Confidential Information.

6.3 Non-Disclosure and Non-Use Obligations. The Receiving Party and its Representatives shall not: (a) disclose any Confidential Information of the Disclosing Party to Third Parties; (b) use any Confidential Information of the Disclosing Party except as is necessary to perform its obligations under this Agreement. The Receiving Party shall immediately cease all use of the any Confidential Information of the Disclosing Party upon termination or expiration of this Agreement, and the obligations of confidentiality shall remain in place for a period of [***] years from expiration or termination of this Agreement.

6.4 Maintenance of Confidentiality. The Receiving Party and its Representatives shall: (a) take reasonable measures to protect the secrecy of, and avoid disclosure and unauthorized use of, the Confidential Information of the Disclosing Party; without limiting the foregoing, the Receiving Party shall take at least those measures that it employs to protect its own confidential information of a similar nature; and (b) reproduce the Disclosing Party's confidential rights notices on any such authorized copies in the same manner in which such notices were set forth in or on the original. The Receiving Party shall promptly notify the Disclosing Party of any unauthorized use or disclosure, or suspected unauthorized use or disclosure, of the Disclosing Party's Confidential Information of which the Receiving Party or its Representatives become aware. Each Party will be responsible for any breach of this Agreement by its Representatives.

6.5 Export Restrictions. The Receiving Party and its Representatives agree not to export or re-export any Confidential Information or product thereof in violation of U.S. or other export control laws or regulations.

6.6 Compelled Disclosure. In the event the Receiving Party is legally required to disclose Confidential Information of the Disclosing Party by judicial or governmental order, or in a judicial or governmental proceeding ("Compelled Disclosure"), the Receiving Party shall: (a) give the Disclosing Party prompt notice of such Compelled Disclosure prior to disclosure; (b) cooperate with the Disclosing Party in the event that it elects to contest such Compelled Disclosure or seek a protective order with respect thereto; and (c) in any event only disclose the exact Confidential Information or portion thereof specifically requested by the Compelled Disclosure.

6.7 Remedies. The Receiving Party agrees that any violation of this Article 6 may cause irreparable injury to the Disclosing Party, entitling the Disclosing Party to seek injunctive relief in addition to all other legal remedies.

6.8 Confidential Terms. Each Party shall treat the terms of this Agreement as the Confidential Information of the other Party. Notwithstanding anything to the contrary, however, each Party may disclose the terms of this Agreement to its directors, officers, employees, Representatives, and actual or potential investors, acquisition partners, lenders, or collaboration partners subject to the restrictions set forth in this Article 6.

6.9 Press Releases. In the event a Party wishes to issue a press release related to this Agreement during the Term, such Party will provide a draft to the other Party at least [***] business days prior to such planned release for review and approval; alternatively, the Parties may decide to issue a joint press release related to this Agreement and, in such event, will exchange drafts prior to issuance of a joint press release. Both Parties shall have the right to post a brief description of the subject of this Agreement (including, but not limited to, the other Party's name and logo, title and date of the Agreement, and scope of the assignments) on its website; provided, however, that such Party shall provide a written copy of the proposed website language to the other Party for review and approval prior to posting.

ARTICLE 7
INDEMNIFICATION

7.1 Indemnification by ProMab. ProMab hereby agrees to indemnify, hold harmless, and defend (collectively, "Indemnify") Caribou and its Affiliates, and their directors, officers, and employees (the "Caribou Indemnitees") from and against any losses, damages, costs, fees, and expenses (including reasonable legal expenses and attorneys' fees) (collectively, "Losses") resulting from any claims, suits, actions, or demands brought by a Third Party (each, a "Third-Party Claim") arising out of [***]. ProMab's obligation to Indemnify Caribou Indemnitees pursuant to this Section shall not apply to the extent that any such Losses arise from the negligence or intentional misconduct of any Caribou Indemnitee or arise from any material breach by Caribou of this Agreement.

7.2 Indemnification by Caribou. Caribou hereby agrees to Indemnify ProMab and its directors, officers, and employees (the "ProMab Indemnitees") from and against any and all Losses resulting from Third-Party Claims arising out of [***]. Caribou's obligation to Indemnify the ProMab Indemnitees pursuant to this Section 7.2 shall not apply to the extent that any such Losses arise from the negligence or intentional misconduct of any ProMab Indemnitee or arise from any material breach by ProMab of this Agreement.

7.3 Indemnification Procedure. To be eligible to be Indemnified hereunder, the indemnified Party shall provide the indemnifying Party with prompt notice of the Third-Party Claim, suit, action, or demand giving rise to the indemnification obligations pursuant to Section 7.1 or 7.2, as applicable, and the exclusive ability to defend (with the reasonable cooperation of the indemnified Party) or settle any such claim; provided, however, that the indemnifying Party shall not enter into any settlement that admits fault, wrongdoing, or damages without the indemnified Party's written consent, such consent not to be unreasonably withheld or delayed. The indemnified Party shall have the right to participate, at its own expense and with counsel of its choice, in the defense of any claim or suit that has been assumed by the indemnifying Party.

ARTICLE 8
TERM AND TERMINATION

8.1 Term. Unless terminated earlier pursuant to Section 8.2(a) or Section 8.2(b), this Agreement shall remain in full force and effect during the Term.

8.2 Termination for Cause.

(a) Material Breach. Either Party, at its sole discretion, may terminate this Agreement for a material breach by the other Party upon [***] prior written notice if the other Party does not cure the breach within such [***] period. (i) In the event of termination under this Section 8.2(a) by ProMab, the covenant not to sue set forth in Section 2.4 shall terminate upon the end of the [***] cure period. (ii) In the event of termination under this Section 8.2(a) by Caribou, the covenant not to sue set forth in Section 2.4 shall remain in full force and effect.

(b) Bankruptcy. Either Party, at its sole discretion, may terminate this Agreement by written notice immediately if the other Party makes an assignment for the benefit of creditors or files for bankruptcy or liquidation, or any decree or order for relief by a court of competent jurisdiction is issued against the other Party under any applicable bankruptcy, dissolution, or liquidation laws. (i) In the event of termination under this Section 8.2(b) by ProMab, the covenant not to sue set forth in Section 2.4 shall terminate on the date it provides written notice to Caribou of such termination. (ii) In the event of termination under this Section 8.2(b) by Caribou, the covenant not to sue set forth in Section 2.4 shall remain in full force and effect.

8.3 Effect of Termination or Expiration. Solely upon termination of this Agreement by ProMab under Section 8.2(a) or Section 8.2(b), Caribou shall (a) immediately cease any and all manufacture, sale, offer for sale, use, import, and/or export of Products, provided, however, that Caribou, its Affiliates, and any direct and indirect sublicensees thereof may, for a period not to exceed [***] from the date of termination, sell any remaining existing inventory of Products, with Caribou remaining responsible for any Calendar Quarter reports under Section 3.3 and associated royalty payments (if any) due to ProMab under Section 3.2 based on such sales; and (b) within [***] of such termination, notify its Affiliates and any direct and indirect sublicensees thereof of the termination of this Agreement.

8.4 Survival. Sections 2.1, 2.2, 2.3, 2.4 (only in the event of termination by Caribou under Section 8.2(a) or Section 8.2(b)), 3.4, 3.5, 3.6, 3.7, 4.3, 5.3, 5.4, 8.2, 8.3, and 8.4, and Articles 1, 6, 7, and 9 shall survive the expiration and any termination of this Agreement. Except as otherwise provided in this Article 8, all other provisions of this Agreement shall terminate upon the expiration or termination of this Agreement.

ARTICLE 9
GENERAL

9.1 Governing Law. This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of California without reference to principles of conflicts of law.

9.2 Assignment of this Agreement. This Agreement shall be assignable by either Party only with the prior written consent of the other Party and any assignment in violation of this Section 9.2 shall be null and void; provided, however, that either Party may assign this Agreement without the other Party's consent to an Affiliate or in connection with the sale or transfer of all or substantially all of the Party's assets or business, provided such Affiliate or successor-in-interest agrees to be bound by all terms and conditions of this Agreement. Furthermore, the covenant not to sue set forth in Section shall be transferable to and for the benefit of an assignee of this Agreement by Caribou upon assignment of this Agreement as permitted under this Section 9.2 and shall be binding with respect to any assignee of ProMab upon assignment of this Agreement by ProMab permitted under this Section 9.2.

9.3 Independent Contractors. The Parties agree that the relationship of ProMab and Caribou established by this Agreement is that of independent contractors. Furthermore, the Parties agree that this Agreement does not, is not intended to, and shall not be construed to, establish an employment, agency, or any other relationship. Except as explicitly set forth herein, neither Party shall have any right, power, or authority, nor shall they represent themselves as having any authority to assume, create, or incur any expense, liability, or obligation, express or implied, on behalf of the other Party, or otherwise act as an agent for the other Party for any purpose. Each Party shall bear its own costs and expenses incurred in the negotiation and preparation of this Agreement.

9.4 Notices. Any notice, request, delivery, approval, or consent required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been sufficiently given if delivered in person, transmitted by facsimile or electronic mail (receipt verified) or by express courier service (signature required), or five (5) business days after it was sent by registered letter, return receipt requested (or its equivalent), to the Party to which it is directed at its address shown below or such other address as provided in writing by one Party to the other Party.

If to ProMab: [***]
[***]

If to Caribou: [***]
[***]

9.5 Compliance with Applicable Laws. Each Party shall comply with all applicable laws in connection with its activities pursuant to this Agreement.

9.6 Force Majeure. Except for nonpayment of monies, neither Party shall be held liable to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in performing any obligation under this Agreement to the extent such failure or delay is caused by or results from causes beyond the reasonable control of the affected Party, potentially including, but not limited to, embargoes, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, fire, floods, or other acts of God, or acts, omissions or delays in acting by any governmental authority or the other Party. The affected Party shall notify the other Party of such force majeure circumstances as soon as reasonably practical, shall promptly undertake all reasonable efforts necessary to cure and/or mitigate such force majeure circumstances, and shall provide updates to the other Party on a regular basis of the force majeure circumstances and efforts to cure and/or mitigate.

9.7 No Waiver. A waiver, express or implied, by either ProMab or Caribou, of any right under this Agreement or of any failure to perform or breach hereof by the other Party shall not constitute or be deemed to be a waiver of any other right hereunder or of any other failure to perform or breach hereof by such other Party, whether of a similar or dissimilar nature thereto.

9.8 Severability. If any provision of this Agreement shall be found by a court to be void, invalid, or unenforceable, the same shall be reformed to comply with applicable laws or stricken if not so conformable, so as not to affect the validity or enforceability of the remainder of this Agreement, and the remainder of this Agreement shall remain in full force and effect.

9.9 Interpretation. The captions and headings to this Agreement are for convenience only and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement. Unless specified to the contrary, references to Articles, Sections, or Exhibit mean the particular Articles, Sections, and Exhibit A and Exhibit B of this Agreement.

9.10 Entire Agreement; Amendments. This Agreement constitutes the entire understanding and agreement between the Parties with respect to the subject matter hereof and supersedes any and all prior and contemporaneous negotiations, representations, agreements, term sheets, and understandings, written or oral, that the Parties may have reached with respect to the subject matter hereof, including but not limited to [***]; all of which are hereby superseded in their entireties and completely replaced by this Agreement. Any and all Confidential Information disclosed under such agreements shall be governed by this Agreement. Any and all amendments and modifications to this Agreement must be in writing and signed by duly authorized representatives of each of the Parties.

9.11 Counterparts. This Agreement may be executed in counterparts, including facsimile, scanned PDF documents, or electronic signature. Each such counterpart shall be deemed an original, and both of which together shall constitute one and the same executed Agreement.

(Remainder of page left intentionally blank; signature page follows)

IN WITNESS WHEREOF, the Parties have executed this Sale and Assignment Agreement by their duly authorized representatives as of the Effective Date set forth above.

ProMab Biotechnologies, Inc.

By: /s/ John Wu
Name: John Wu, Ph.D.
Title: Chief Executive Officer

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz, Ph.D.
Title: President & Chief Executive Officer

Exhibit A

Assigned Patent Rights

Humanized BCMA CAR-T Cells

Country	Patent application number	Filing date	Status
US	62/793,274	01/16/2019	Expired
WO	PCT/US2020/013662	01/15/2020	Pending

Exhibit B

Sequence of PMC306

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.4

CONFIDENTIAL

AMENDMENT NO. 1 TO SALE AND ASSIGNMENT AGREEMENT

This Amendment No. 1 to Sale and Assignment Agreement (this "Agreement"), is in effect as of the Effective Date of the Sale and Assignment Agreement, and is by and between ProMab Biotechnologies, Inc., having an address at 2600 Hilltop Drive, Richmond, CA 94806 ("ProMab"), and Caribou Biosciences, Inc., having a place of business at 2929 7th Street, Suite 105, Berkeley, CA 94710 USA ("Caribou"). Capitalized terms not defined herein shall have the meanings set forth in the Sale and Assignment Agreement, having an Effective Date of January 31, 2020 (the "Agreement").

WHEREAS, the Parties entered into the Agreement, wherein Caribou took assignment of all right, title, and interest in PMC 306 and the Assigned Patent Rights;

WHEREAS, the Parties would like to correct certain typographical errors and otherwise amend the Agreement as set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Section 1.6 is hereby deleted in its entirety and replaced with the following Section 1.6:

"1.6 "Net Sales" means, with respect to any and all Products, gross invoiced amounts for Products sold by Caribou, its Affiliates, its licensees, and any direct and indirect sublicensees thereof, to Third Parties, less applicable [***]."

2. Section 2.4 is hereby deleted in its entirety and replaced with the following Section 2.4:

"2.4 Covenant Not to Sue. Additionally, ProMab hereby covenants not to sue Caribou, its Affiliates, its licensees, and any direct and indirect sublicensees thereof, during the Term in the event that a Product or the use, manufacture, sale, offer for sale, importation, or exportation thereof infringes any intellectual property Controlled by ProMab. This covenant not to sue shall be transferable to and for the benefit of an assignee of this Agreement by Caribou upon assignment of this Agreement as set forth in Section 9.2 and shall be binding with respect to any assignee of ProMab upon assignment of this Agreement by ProMab as set forth in Section 9.2."

3. Section 3.3 is hereby deleted in its entirety and replaced with the following Section 3.3:

"3.3 Calendar Quarter Reports. Within [***] calendar days after the end of each Calendar Quarter during the Term, Caribou shall deliver to ProMab (a) a detailed report specifying in the aggregate (i) total invoiced amounts to Third Parties for Products by Caribou, its Affiliates, its licensees, and any direct and indirect sublicensees thereof; and (ii) amounts deducted by category (as defined in Section 1.6) from gross invoiced amounts to calculate Net Sales of Products; and (b) payment of royalties due."

4. New Section 3.7 is hereby added:

"3.7 Collection Costs. In addition to the interest on late payments set forth in Section 3.7, in the event that Caribou has Net Sales on Products and does not pay royalties on such Net Sales when due, unless there is a valid dispute as to the amount of royalties due, ProMab may institute collection proceedings against Caribou after providing [***] written notice to Caribou in the event that Caribou does not pay such royalties due within [***] thereafter. Caribou shall reimburse ProMab for its out-of-pocket costs in pursuing collection of the royalties due."

5. Section 8.3 is hereby deleted in its entirety.

6. Except as explicitly amended above, all other terms of the Agreement remain in full force and effect, and the Parties hereby ratify the Agreement as amended herein.

7. This Amendment No. 1 to Sales and Assignment Agreement may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed document.

IN WITNESS WHEREOF, the Parties have executed this Amendment No. 1 to Sale and Assignment Agreement by their duly authorized representatives as of the Effective Date set forth above.

ProMab Biotechnologies, Inc.

By: /s/ John Wu
Name: John Wu, Ph.D.
Title: Chief Executive Officer

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz, Ph.D.
Title: President & Chief Executive Officer

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.5

AMENDMENT NO. 2 TO SALE AND ASSIGNMENT AGREEMENT

This Amendment No. 2 to Sale and Assignment Agreement (this "Agreement"), is in effect as of the Effective Date of the Sale and Assignment Agreement, and is by and between ProMab Biotechnologies, Inc., having an address at 2600 Hilltop Drive, Richmond, CA 94806 ("ProMab"), and Caribou Biosciences, Inc., having a place of business at 2929 7th Street, Suite 105, Berkeley, CA 94710 USA ("Caribou"). Capitalized terms not defined herein shall have the meanings set forth in the Sale and Assignment Agreement, having an Effective Date of January 31, 2020, as amended by Amendment No. 1 to Sale and Assignment Agreement (collectively, the "Agreement").

WHEREAS, the Parties entered into the Agreement, wherein Caribou took assignment of all right, title, and interest in PMC 306 and the Assigned Patent Rights;

WHEREAS, the Parties would like to clarify a certain section as set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Section 3.2(a) is hereby deleted in its entirety and replaced with the following Section 3.2(a):

[***]

[***]

[***] [***]
[***] [***]
[***] [***]

[***]

2. Except as explicitly amended above, all other terms of the Agreement remain in full force and effect, and the Parties hereby ratify the Agreement as amended herein.

3. This Amendment No. 2 to Sales and Assignment Agreement may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed document.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Sale and Assignment Agreement by their duly authorized representatives of the Effective Date set forth above.

ProMab Biotechnologies, Inc.

By: /s/ John Wu
By: John Wu, Ph.D.
Title: Chief Executive Officer

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz, Ph.D.
Title: President & Chief Executive Officer

Exhibit 10.6

CONFIDENTIAL

AMENDMENT NO. 3 TO SALE AND ASSIGNMENT AGREEMENT

This Amendment No. 3 to Sale and Assignment Agreement (the "Agreement") is made to the Sale and Assignment Agreement, having an Effective Date of May 5, 2020, and is effective as of the Effective Date of the Sale and Assignment Agreement, and is by and between ProMab Biotechnologies, Inc., having an address at 2600 Hilltop Drive, Richmond, CA 94806 ("ProMab"), and Caribou Biosciences, Inc., having a place of business at 2929 7th Street, Suite 105, Berkeley, CA 94710 USA ("Caribou"). Capitalized terms not defined herein shall have the meanings set forth in the Sale and Assignment Agreement, as amended by Amendment No. 1 to Sale and Assignment Agreement and Amendment No. 2 to Sale and Assignment Agreement (collectively, the "Agreement").

WHEREAS, the Parties entered into the Agreement, wherein Caribou took assignment of all right, title, and interest in PMC 306 and the Assigned Patent Rights;

WHEREAS, the Parties would like to amend the Agreement as set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Section 2.4, as previously deleted and replaced by Amendment No. 1 to Sale and Assignment Agreement, is hereby deleted in its entirety and replaced with the following Section 2.4:

"2.4 Covenant Not to Sue. Additionally, ProMab and its Affiliates hereby covenant not to, directly or indirectly, sue, bring an action against, or seek to enforce, in any court or jurisdiction, Caribou, its Affiliates, any direct licensees, direct and indirect sublicensees, collaboration partners, distributors, subcontractors, manufacturers, customers, prescribers, end users, successors, or assignees ("Caribou Parties") alleging that a Product or the use, manufacture, sale, offer for sale, importation, or exportation thereof infringes or misappropriates any intellectual property Controlled by ProMab ("Non-Assert Intellectual Property"). As set forth in Section 9.2, this covenant not to sue shall be transferable to and for the benefit of any permissible Caribou assignee of this Agreement and shall be binding upon any permissible ProMab assignee of this Agreement."

2. Section 9.2 is hereby deleted in its entirety and replaced with the following Section 9.2:

"9.2 Assignment of this Agreement. (a) This Agreement shall be assignable by either Party only with the prior written consent of the other Party and any assignment in violation of this Section 9.2 shall be null and void; provided, however, that either Party may assign this Agreement without the other Party's consent to an Affiliate or in connection with the sale or transfer of all or substantially all of the Party's assets or business, provided such Affiliate or successor-in-interest agrees to be bound by all terms and conditions of this Agreement. (b) ProMab hereby acknowledges and agrees that (i) in the event ProMab assigns or transfers this Agreement in accordance with Section 9.2(a), as a condition of such assignment or transfer, the covenant not to sue set forth in Section 2.4 shall be binding upon, and enforceable against, any assignee, purchaser, or successor in interest of this Agreement; (ii) the covenant not to sue set forth in Section 2.4 shall run with any and all Non-Assert IP for the full term of the Non-Assert IP; and (iii) conditional upon, and prior to execution of, any assignment of any Non-Assert IP, ProMab shall secure a written agreement with the future assignee of the Non-Assert IP acknowledging and agreeing to be bound by a covenant not to sue Caribou Parties under such Non-Assert IP. (c) In the event Caribou assigns or transfers this Agreement in accordance with Section 9.2(a), the covenant not to sue set forth in Section 2.4. shall be transferable to, and for the benefit of, any assignee, purchaser, or successor in interest of this Agreement."

3. Except as explicitly amended above, all other terms of the Agreement remain in full force and effect, and the Parties hereby ratify the Agreement as amended herein.

4. This Amendment No. 3 to Sales and Assignment Agreement may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed document.

IN WITNESS WHEREOF, the Parties have executed this Amendment No. 3 to Sale and Assignment Agreement by their duly authorized representatives as of the Effective Date set forth above.

ProMab Biotechnologies, Inc.

By: /s/ John Wu

Name: John Wu, Ph.D.
Title: Chief Executive Officer

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz

Name: Rachel E. Haurwitz, Ph.D.
Title: President & Chief Executive Officer

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.7

AMENDED AND RESTATED
COLLABORATION AND LICENSE AGREEMENT

THIS AMENDED AND RESTATED COLLABORATION AND LICENSE AGREEMENT ("Agreement") completely supersedes and replaces, as of July 13, 2015 ("the "Amended Effective Date"), the Collaboration and License Agreement by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 120, Berkeley, California 94710 ("Caribou Bio"), (Caribou Bio and Pioneer, each individually a "Party", and together the "Parties"), [***].

WHEREAS, Caribou Bio is an early stage biotechnology company focused on, among other things, the research and development of tools and technologies for cellular engineering and analysis; and

WHEREAS, Pioneer and its Affiliates, including E.I. du Pont de Nemours & Company ("DuPont"), are in the business of research, development, production, marketing and commercialization of products and processes benefitting its customers and consumers worldwide in numerous areas such as but not limited to agriculture and industrial biotechnology; and

WHEREAS, each Party has been conducting research related to CRISPR Technology (as defined below), and each Party and its Affiliates have developed or acquired certain intellectual property related to CRISPR Technology; and

[***]

NOW, THEREFORE, in consideration of the mutual agreements contained in this Agreement, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. DEFINITIONS.

When used in this Agreement, the following terms shall have the meanings set out below. The singular shall be interpreted as including the plural and vice versa, unless the context clearly indicates otherwise. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include," "includes" and "including" shall be deemed to be followed by the phrase "without limitation."

1.1 "Affiliate" means, with respect to an Entity, any Entity that, as of the Effective Date and/or at any time thereafter, directly or indirectly controls, or is controlled by, or is under common control with such Entity, for so long as such control exists, where "control" means ownership, directly or through one or more Affiliates, of [***] (or such lesser percentage which is the maximum allowed to be owned by a foreign entity in a particular jurisdiction) or more of the shares of stock entitled to vote for the election of directors in the case of a corporation, or [***] (or such lesser percentage which is the maximum allowed to be owned by a foreign entity in a particular jurisdiction) or more of the voting equity interests in the case of any other type of legal entity, or any other arrangement whereby an Entity controls or has the right to control the board of directors or equivalent governing body of a corporation or other Entity. For purposes of this Agreement, Pioneer's Affiliates shall include without limitation, DuPont and its Affiliates. [***]; and (b) Caribou Bio's Affiliates shall not include Identified Parties.

1.2 "Acquisition" means (i) a transaction involving a Party, in which the shareholders of such Party immediately prior to such transaction cease to control (as defined in Section 1.1) such Party after such transaction; (ii) a sale or transfer of all or substantially all of the assets or business of such Party to an acquiring Entity; (iii) a sale of a controlling (as defined in Section 1.1) interest of such Party to an acquiring entity; or (iv) in the case of Caribou Bio, any arrangement or transaction that results in Caribou Bio becoming an Identified Party.

1.3 "Agricultural Biologicals" means materials (including but not limited to nucleic acids, proteins and other substances, microorganisms, insects and nematodes, and/or extracts or derivatives of plants, microorganisms, insects, nematodes or other animals) for use on, use with or application to a Plant or Crop.

1.4 "Agricultural Biological Use and Applications Field" means any and all uses and applications (including uses and applications of materials) in, of and/or for (including but not limited to the research, development, manufacture and commercialization of) Agricultural Biologicals for, or that involve, modifying, enhancing or altering a phenotypic or agronomic characteristic of a Plant or Crop on, with, or for which such Agricultural Biological is used, or to which such Agricultural Biological is applied. [***]

a. "Pioneer Crop Agricultural Biological Use and Application Field" means the Agricultural Biological Use and Application Field for Pioneer Crops.

b. "Shared Agricultural Biological Use and Application Field" means Agricultural Biological Use and Application Field for non-Pioneer Crops.

1.5 "Annual Net Revenues" means, with respect to Revenue Product(s), Net Revenues received by a Party or its Affiliates for such Revenue Product(s) in a calendar year.

1.6 "Annual Net Trait Revenues" means, with respect to Licensed Products that express, comprise or contain [***], Net Trait Revenues received by Pioneer or its Affiliates for such Licensed Product or [***] in a calendar year.

1.7 "Applicable Law" means all laws, rules, and regulations imposed by a governmental authority applicable to [***] the development or commercialization of Licensed Products.

1.8 "Background Property" means, with respect to a Party, such Party's Background Materials, Background Confidential Information and Background IP excluding Program Results.

a. "Background Materials" means, subject to the terms of Section 11.1, Materials which such Party (or its Affiliates) Controls as of the Effective Date or during the Program Term or License Term, which was not or is not conceived, created or discovered in the performance of the Research Program, and which such Party has made or makes available (at such Party's sole discretion subject only to Section 2.7) for the Parties' performance of the Research Program or otherwise under the licenses of Article 6.

b. "Background Confidential Information" means, subject to the terms of Section 11.1, Confidential Information which such Party (or its Affiliates) Controls as of the Effective Date or during the Program Term or License Term, which was not or is not conceived, created or discovered in the performance of the Research Program, and which such Party has made or makes available (at such Party's sole discretion subject only to Section 2.7) for the Parties' performance of the Research Program or otherwise under the licenses of Article 6.

c. "Background Intellectual Property" or "Background IP" means (a) with respect to Caribou Bio, the Caribou Bio Background IP and (b) with respect to Pioneer, the DuPont Pioneer Background IP.

i. "Caribou Bio Background IP" means patents and patent applications coveting Intellectual Property in or comprising CRISPR Technology which Caribou Bio or a Caribou Bio Affiliate Controls as of the Effective Date, including CRISPR-Cas IP conceived or reduced to practice by Caribou Bio or Caribou Bio Affiliates prior to the Effective Date. Caribou Bio Background IP includes: (i) the patents and patent applications listed in Appendix D, as may be updated by written agreement from time to time by Caribou Bio and Pioneer; (ii) any divisions, continuations, continuations in part, substitutions, registrations, reissues, reexaminations or extensions of such patents and patent

applications described in clause (i); (iii) any patents and patent applications that claim priority to or common priority with, whether in whole or in part, any of the foregoing patent applications; (iv) any patents issuing on the patent applications described in clause (i), (ii), or (iii); and (v) any foreign equivalents of or counterparts to any of the foregoing. For avoidance of doubt, Caribou Bio Background IP includes the rights under Berkeley IP which are licensed to Caribou Bio under the UC/Vienna License (as defined in Section 1.9), but does not include the rights under such Intellectual Property which are retained by the Other Co-Owner of such Intellectual Property and which has not, as of the Effective Date, been assigned or licensed, directly or indirectly, to Caribou Bio.

ii. "DuPont Pioneer Background IP" means patents or patent applications covering Intellectual Property in or comprising CRISPR Technology which Pioneer, DuPont or their Affiliate Controls as of the Effective Date, including CRISPR-Cas IP conceived or reduced to practice by Pioneer or Pioneer Affiliates prior to the Effective Date. DuPont Pioneer Background IP includes: (i) the patents and patent applications listed in Appendix E, as may be updated by written agreement from time to time by Pioneer and Caribou Bio; (ii) any divisions, continuations, continuations in part, substitutions, registrations, reissues, reexaminations or extensions of such patents and patent applications described in clause (i); (iii) any patents and patent applications that claim priority to or common priority with, whether in whole or in part, any of the foregoing patent applications; (iv) any patents issuing on the patent applications described in clause (i), (ii), or (iii); and (v) any foreign equivalents of or counterparts to any of the foregoing. DuPont Pioneer Background IP shall not include any Intellectual Property of Pioneer or its Affiliates which is not CRISPR-Cas IP; [***]

1.9 "Berkeley IP" means the patents and patent applications which are the subject of an exclusive license dated 16 April 2013, as amended, granted to Caribou Bio from the Regents of the University of California and University of Vienna ("UC Vienna License") and attached hereto as Appendix F. For clarity, as of the Effective Date, the Berkeley IP is jointly owned by the Regents of the University of California, the University of Vienna, and Emmanuelle Charpentier (Emmanuelle Charpentier, the "Other Co-Owner"), and the Other Co-Owner has not granted Caribou Bio any rights (in any field of use), either directly or indirectly (including either through the Regents of the University of California or the University of Vienna), in such Intellectual Property.

1.10 "Caribou Bio Strategic Field" or "CSF" means (a) the Research Tool Field and (b) the Therapeutic Field.

1.11 "Confidential Information" means (a) any existing or independently developed, non-public information, know-how, trade secrets, and data, technical or non-technical, that is disclosed or provided by or on behalf of one Party to the other Party for the Research Program or otherwise under this Agreement, and/or (b) all information, know-how, trade secrets and data, technical or nontechnical, that is developed or discovered under the Research Program or otherwise under this Agreement; except in each case for information:

a. that is or becomes generally known or available to the public without breach of this Agreement;

b. that is known to the receiving Party or its Affiliate(s) at the time of disclosure [***], as evidenced by prior written records of the receiving Party or its Affiliate(s);

c. that is independently developed at any time by or for the receiving Party or its Affiliate(s) without the application or use of, or reference to, the other Party's Confidential Information, as evidenced by written records of the receiving Party or its Affiliate(s); or

d. that is disclosed without an accompanying duty of confidentiality to the receiving Party or its Affiliate(s) in good faith by a Third Party who has an independent right to such subject matter and information.

Confidential Information, in written, graphic, oral, photographic, electronic or any other form, includes, but is not limited to, information in or about algorithms, computer programs and/or software, data, documentation, formulae, know-how, methods, object code, protocols, plans, processes, reports, results, samples, scans, source code, specifications, techniques, technical drawings, trade secrets, technical data, technical information, templates, and any replication or unmodified derivative of any of the foregoing.

1.12 "Control" means, with respect to any Material, Confidential Information or Intellectual Property, that a Party or its Affiliates owns or has a license to such Material, Confidential Information or Intellectual Property with the light to grant to the other Party access, a license, or a sublicense (as applicable) to such Material, Confidential Information or Intellectual Property on the terms and conditions set forth herein without violating the terms of any agreement or other arrangement with, or rights of, any Third Party existing as of the date such Party would be first required hereunder to grant to the other Party such access, license, or sublicense.

1.13 "CRISPR-Cas IP" means Intellectual Property in or comprising CRISPR Technology.

1.14 "CRISPR Technology" means Intellectual Property, Materials, Confidential Information and any other information (including data and know-how) relating to CRISPRs (Clustered Regularly Interspaced Short Palindromic Repeats) in a nucleic acid and CRISPR-associated proteins ("Cas") (including but not limited to Cas9 and other CRISPR-associated proteins including RNA-guided nucleases or other proteins associated with or having a function related to CRISPRs), and applications involving the recognition and/or function of CRISPRs or Cas proteins.

1.15 "DuPont Industrial Biotechnology Applications Field" means any and all uses and applications in, of and/or for (including but not limited to the research, development, manufacture and commercialization of) [***] for the industrial production of ethanol and/or biobutanol, and for the production, including baking and brewing, of foods, feeds and beverages and/or functional foods, feeds and beverages (including ingredients thereof) and the sale of such foods, feeds and beverages and/or functional foods, feeds and beverages (including ingredients thereof).

1.16 "DuPont Pioneer Microorganisms Field" means any and all uses and applications (including uses and applications of materials) in, of and/or for (including but not limited to the research, development, manufacture and commercialization of): (a) [***] and (b) all microorganisms which are pests, beneficials or pathogens of Pioneer Crops for use on Pioneer Crops and/or seed or forage inoculants [***] [***]for all agricultural related uses and/or applications for or with Pioneer Crops including as seed or forage inoculants[***].

1.17 "DuPont Nutrition & Health Field" means any and all uses and applications in, of and/or for (i) the modifying, enhancing, manipulating or altering of [***] strains through the use of CRISPR Technology to achieve immunization of bacterial strains against infection, including but not limited to, for use of such immunized bacterial strains in the production of foods, feeds or beverages or ingredients or supplements for use in foods, feeds or beverages ("N&HFoods/Feeds/Beverages/Ingredients/Supplements") and/or the labeling, tagging, typing and/or identifying of bacteria for the production of N&H Foods/Feeds/Beverages/Ingredients/Supplements by use of CRISPR Technology; and (ii) use of CRISPR Technology to design and produce [***] that are, for example, altered in their protospacers, CRISPR recognition sequences and/or recognition motifs for uses of such bacteriophage mutants to control or detect bacterial infection in food, pharmaceutical, personal care and cosmetic manufacturing facilities, and/or to use such bacteriophage mutants to generate bacteriophage-resistant bacterial strains. The DuPont Nutrition & Health Field [***].

1.18 "DuPont Pioneer Strategic Field" or "DPSF" means the (a) Pioneer Agriculture Field, (b) DuPont Pioneer Microorganisms Field, (c) DuPont Industrial Biotechnology Applications Field and (d) DuPont Nutrition & Health Field.

1.19 "Entity" means a person, corporation, firm, limited liability company, association, partnership, joint venture or any other commercial enterprise existing now or in the future.

1.20 "Expiration" means the date this Agreement expires as set forth in Article 9.

1.21 "Identified Parties" means (i) the Plant Identified Parties; (ii) the Microorganism Identified Parties; and (iii) the Nutrition & Health Identified Parties.

a. "Plant Identified Parties" means : (w) [***] (each a "Plant First Level ID Party"); (x) any Entity in which any Plant First Level ID Party (directly or indirectly through an Entity which is controlled (as defined in Section 1.1) by any Plant First Level ID Party or an Affiliate) owns [***] or greater of the shares of stock entitled to vote for the election of directors or on other management decisions in the case of a corporation, or of the voting equity interests in the case of any other type of Entity; (y) any Affiliate of any Plant First Level ID Party, and/or (z) any successor or acquirer of any Entity that either falls under clause (w) of this Section 1.22(a).

b. "Microorganism Identified Parties" means: (w) [***] (each a "Microorganism First Level ID Party"); (x) any Entity in which any Microorganism First Level ID Party (directly or indirectly through an Entity which is controlled (as defined in Section 1.1) by any Microorganism First Level ID Party or an Affiliate) owns [***] or greater of the shares of stock entitled to vote for the election of directors or on other management decisions in the case of a corporation or of the voting equity interests in the case of any other type of Entity; (y) any Affiliate of any Microorganism First Level ID Party and/or (z) any successor or acquirer of any Entity that either falls under clause (w) of this Section 1.22(b).

c. "Nutrition & Health Identified Parties" means: (w) [***] (each a "N&H First Level ID Party"); and (x) any Entity in any N&H First Level ID Party (directly or indirectly through an Entity which is controlled (as defined in Section 1.1) by any N&H First Level ID Party or an Affiliate) owns [***] or greater of the shares of stock entitled to vote for the election of directors or on other management decisions in the case of a corporation or of the voting equity interests in the case of any other type of Entity; (y) any Affiliate of any N&H First Level ID Party and/or (z) any successor or acquirer of any Entity that either falls under clause (w) of this Section 1.22(c).

[***]

1.23 "Intellectual Property" or "IP" means without limitation (a) any invention, improvement, or discovery, whether or not patentable or legally protectable, and (b) any intellectual property rights covering any of the matters described in (a) including, but not limited to, patents, patent rights, patent applications, plant variety protection certificates, plant variety protection applications, (including any divisions, continuations, continuations in part, substitutions, registrations, reissues, reexaminations or extensions of the preceding, and any foreign equivalents of or counterparts to any of the foregoing), copyright, and trade secrets.

1.24 "License Term" means, with respect to the licenses granted to a Party hereunder, the period from the Effective Date until the earlier of Termination or Expiration of this Agreement.

1.25 "Licensed Product" means (i) any product, the manufacture, use, sale, offer for sale, import or export of which, but for the licenses granted to a Party under this Agreement, would infringe a Valid Claim of either the other Party's Background IP or the Program IP or (ii) any product that contains modifications or alterations of a nucleic acid sequence that were introduced through the practice of a Valid Claim of either the other Party's Background IP or the Program IP.

1.26 [Intentionally omitted]

1.27 "Materials" means any material, biological or non-biological, including but not limited to, reagents, chemicals, molecules, equipment, electronic media, prototypes, organisms, antibodies, cells, cultivars, lines, hybrids, inbreds, germplasm, plasmids, vectors, DNA, RNA, protein, microorganisms, plants, tissues and propagating materials developed from any of the foregoing, and any replication or immaterial modification of any such materials.

1.28 "Modified Pioneer Germplasm, Traits and Associated Intellectual Property" means (i) any germplasm of Pioneer Crops originating from Pioneer or a Pioneer Affiliate (including extracts or derivatives of such Pioneer or Pioneer Affiliate germplasm[***], (ii) any trait, trait sequence or event, including [***], introduced into a Plant or Crop by Pioneer or a Pioneer Affiliate; and (iii) any Intellectual Property specifically covering the composition of or method(s) of making (except method(s) of making through the use of or comprising CRISPR Technology) or using specific to (i) or (ii).

1.29 "Net Revenues" means with respect to any Revenue Product, gross amounts received by a Party or its Affiliates (each, a "Selling Party") for the sale by the Selling Party of such Revenue Product in the applicable country to Third Parties, less [***].

[***]

b. In the event a Selling Party sells any Revenue Product in combination with another product or service for which a royalty is not owed hereunder (a "Combination Product"), Net Revenues of such Combination Product shall be calculated by [***]

1.30 "Net Trait Revenues" means:

[***]

b. [***]

1.31 "Net Selling Price/Unit" means the sales price of a unit of Pioneer Crop Licensed Product or [***] (or the comparable product referenced in the definition of Net Trait Revenue) that is invoiced by Pioneer or its Affiliates, less [***].

1.32 [Intentionally omitted]

1.33 [Intentionally omitted]

1.34 [Intentionally omitted]

[***]

1.36 "Plant or Crop" means a plant or crop and (a) seeds, grain, plants and plant parts of such plant or crop and (b) any progeny, derivatives, extracts or components of the items listed in clause (a).

1.37 "Pioneer Agriculture Field" means (a) the Pioneer Crops Field, (b) [***] and (c) the Pioneer Crop Agricultural Biological Use and Applications Field.

[***]

1.40 "Pioneer Crops" has the meaning ascribed to it in Section 1.42.

[***]

1.42 "Pioneer Crop Field" means any and all uses and applications (including uses and applications of materials) in, of and/or for (including but not limited to the research, development, manufacture and commercialization of) any of the following plant species: [***], and any (a) seeds, grain, plants and plant parts of such species and (b) any replications, progeny, components, derivatives or extracts of any of the items listed in clause (a) (such species listed above and items in clause (a) and (b), "Pioneer Crops"). [***]

1.43 "Program Results" means the Program Materials, Program Confidential Information and Program Intellectual Property:

[***]

c. "Program Intellectual Property" or "Program IP" is patents and patent applications covering Intellectual Property conceived, created, discovered or developed singly by a Party or jointly by the Parties in the performance of the Research Program. For avoidance of doubt, Program IP includes any and all United States and foreign patent applications and patents claiming any Program Results, whether filed during or after the Program Term.

[***]

1.48 "Research Tool Field" means any and all uses and applications (including uses and applications of materials) in, of and/or for (including but not limited to research, development and/or manufacture of) cells, organisms, kits or reagents ("Tools") for sale to Third Parties, and the fee for service provision of services to Third Parties using Tools, where such Tools offered for sale to Third Parties are labeled for (and are sold under a research use-only label license) and used or intended for use by such Third Parties for research purposes only and such services are used or intended for use by such Third Parties for research purpose only and the Third Party recipient of such services are notified that such services are to be used for research purpose only. [***]

1.49 "Restricted Agricultural Microorganism ID Parties Non-Exclusive Field" means applications and uses of microorganisms (including but not limited to all microorganisms [***]) for use on, use with or application to Plants or Crops within the SANF conducted by a Microorganism Identified Party for, on behalf of, at the request, direction or behest of, and/or in conjunction or collaboration with a Plant Identified Party.

1.50 "Revenue Product" means [***] a Licensed Product [***].

1.51 "Shared Agricultural Non-Exclusive Field" or "SANF" means (a) any and all uses and applications in and/or for (including but not limited to the research, development, manufacture and commercialization of) Plants or Crops of species other than Pioneer Crops and (b) the Shared Agricultural Biologicals Use and Applications Field, except solely to the extent that any such uses and applications are in the Research Tool Field.

1.52 "Shared Non-Exclusive Field" or "SNF" means any and all applications and uses other than applications and uses within (a) the Caribou Bio Strategic Field, (b) the DuPont Pioneer Strategic Field, or (c) the Shared Agricultural Non-Exclusive Field. For avoidance of doubt, the Shared Non-Exclusive Field includes uses in and/or for health microorganisms which are probiotics and derivatives thereof in foods, feeds and beverages and/or functional foods, feeds and beverages (including ingredients thereof).

1.53 "Strategic Field" means, with respect to Caribou Bio, the Caribou Bio Strategic Field, and, with respect to Pioneer, the DuPont Pioneer Strategic Field.

1.54 "Sublicense" means an agreement in which a Party (or its Affiliate or a permitted or authorized Sublicensee of a Party or its Affiliate) grants to a Third Party a sublicense [***] and/or the other Party's Confidential Information and/or Background Intellectual Property licensed to such Party pursuant to this Agreement.

1.55 "Sublicensee" means any Third Party to which a Party or its Affiliate or a permitted or authorized Sublicensee has granted a Sublicense.

1.56 "Sublicensing Revenue" shall mean [***]

1.57 "Termination" means the date this Agreement is terminated pursuant to Section 9.2 or Section 12.6. "Terminate" means the act of such Agreement Termination.

1.58 "Therapeutic Field" means the diagnosis, detection, prognostication, measurement, treatment, prevention or prophylaxis of a disease, disorder or medical condition in, and any and all other uses in and/or for, animals (including humans), animal systems (including animal cell cultures) and/or animal pathogens, including the research, development, manufacture and/or commercialization of diagnostics, therapeutics and/or other medical related products (excluding foods, feeds and beverages and functional foods, feeds and beverages, and ingredients thereof) in and/or for any of the foregoing purposes. The Therapeutic Field excludes uses and applications in and/or for animals (including nematodes, insects and other animals) which are pests, beneficials and/or pathogens of a Plant or Crop and microorganisms, in each case for use for forage or agricultural purposes.

1.59 "Third Party" means any Entity that is not a Party, or an Affiliate of a Party, to this Agreement.

1.60 "Valid Claim" means a claim in an issued, unexpired, and unabandoned patent, and/or a claim of a pending patent application, in either case which has not been held unpatentable, invalid, or unenforceable by a court or other governmental agency of competent jurisdiction in a final decision from which no appeal can be taken. A claim of a pending patent application shall cease to be a Valid Claim if no patent containing such claim is granted within [***] years from the priority date of said patent application, provided that a claim in such a pending patent application shall be a Valid Claim (subject to the restrictions set forth herein) if and when it becomes a claim of an issued patent.

1.61 "Worldwide" means any and all countries and territories in the world.

[***]

3. PAYMENTS.

In consideration of each Party's contributions and rights and options granted to the other Party under this Agreement, the following payments shall be made as set forth, and subject to, the provisions of this Article 3:

[***]

3.2 Prior to the date of the first payment in Section 3.1, Caribou Bio shall provide to Pioneer full remit-to information for wired payments to Caribou Bio, and thereafter shall promptly provide to Pioneer any changes to such information during the Program Term and the License Term. In the event that any such changed information is not provided to Pioneer before any payment date, Pioneer's payment by the respective payment date shall not be considered overdue if it is made to the address last provided by Caribou Bio to Pioneer. Pioneer's contract administrator for the Pioneer payments to Caribou Bio under this Agreement is named below. Pioneer may change its contract administrator at any time by providing written notice thereof to Caribou Bio. All correspondence regarding payment matters under this Agreement shall be sent to the Pioneer contract administrator, and shall reference [***]:

[***]

3.3 Commercial Payments. The Parties shall make the commercial payments during the License Term set forth in this Section 3.3 in consideration for the rights and licenses granted to each Party and their respective Affiliates in Article 6.

a. Pioneer Commercial Payments to Caribou Bio. The following commercial payments shall be made from Pioneer or DuPont (as applicable for the respective payment) to Caribou Bio for Revenue Products or Licensed Products, as described below, of Pioneer or Pioneer Affiliates or Sublicensee in the Pioneer Agriculture Field upon the first achievement of the corresponding milestone event.

[***]

i. Pioneer Crop Commercial Milestone Payments. Pioneer shall make the following commercial milestone payments to Caribou Bio for Licensed Products that are Pioneer Crops:

[***]

ii. [Intentionally omitted]

iii. [***] Milestone Payments. Pioneer shall make the following commercial milestone payments to Caribou Bio for Licensed Products sold by Pioneer or a Pioneer Affiliate that express, comprise or contain a [***]:

[***]

iv. [***] Milestone Payments. Pioneer shall make the following commercial milestone payments to Caribou Bio [***]

[***]

v. Other Commercial Payments – Sublicensing Revenue/Royalties. In addition to the commercial milestone payments set forth in subparts (i) and (iii)-(iv) of this Section 3.3(a), the commercial payments described under Section 3.3(c) and (d) shall also be made to Caribou Bio.

b. Caribou Bio Commercial Payments to Pioneer. The following commercial payments shall be made from Caribou Bio to Pioneer for Revenue Products of Caribou Bio, Caribou Bio Affiliates or Sublicensees in the Caribou Bio Strategic Field; [***]

i. Caribou Bio Commercial Milestone Payments. Caribou Bio shall make the following commercial milestone payments to Pioneer for Revenue Products of Caribou Bio or its Affiliates or its Sublicensees. [***]

[***]

ii. Other Commercial Payments – Sublicensing Revenue/Royalties. In addition to the commercial milestone payments set forth in subpart (i) of this Section 3.3(b), the commercial payments described under Section 3.3(c) and (d) shall also be made from Caribou Bio to Pioneer.

c. Sublicensing Revenue Payments. Each Party shall pay to the other Party a percentage of, in the case of Pioneer its Sublicensing Revenues in the Pioneer Agriculture Field, and in the case of Caribou Bio its Sublicensing Revenues in the [***], as follows, within [***] days after the calendar quarter in which the respective Sublicensing Revenues are received from the Sublicensee:

[***]

d. Royalty Payments.

i. Royalty. Each Party shall pay to the other Party a royalty on sales of cells, organisms, kits or reagents that are Licensed Products equal to [***] of Net Revenues received by a Party or its Affiliate [***]

ii. Royalty Term. The royalty payments for a Licensed Product owed under this Section 3.3(d) shall continue, on a country-by-country and Licensed Product-by-Licensed Product basis, for Licensed Products sold during the License Term until there is no Valid Claim within the other Party's Background IP and/or Program IP in the country of sale that causes such product to be a Licensed Product, and thereafter no such royalty payments shall be due or payable to the other Party for such Licensed Products with respect to such country. Notwithstanding the foregoing, no Party shall owe the other Party royalties on Licensed Products sold in any country after Termination of this Agreement.

iii. Royalty Stacking. In the event that a Party or its Affiliates are required to pay a royalty to a Third Party with respect to any patents covering a particular Licensed Product, then such Party shall have the right to deduct [***] of such royalty paid to such Third Party from the royalty payments otherwise owing to the other Party under this Section 3.3(d) with respect to such Licensed Product in the calendar quarter in which such royalty is payable; provided that in no event shall the royalty payment to the other Party under this Section 3.3(d) be so reduced to less than [***] of Net Revenues.

iv. Royalty Reports and Payments. All royalty payments under this Section 3.3(d) shall be due and payable within [***] days after the end of the calendar quarter during which the corresponding Net Revenues are received. Together with any such payment, each Party shall deliver a report to the other Party specifying in the aggregate and on Licensed Product-by-Licensed Product and country-by-country basis: (i) total gross invoiced amount from sales by the Party and its Affiliates of Royalty Products; (ii) amounts deducted by category from gross invoiced amounts to calculate Net Revenues; (iii) Net Revenues from sales of Royalty Products and (iv) royalties payable. Such reports shall be deemed to be the Confidential Information of the Party submitting it.

e. Books and Records. Each Party shall, and shall cause its Affiliates to, keep full and accurate books and records setting forth gross sales of Revenue Products, Net Revenues, Net Trait Revenues, Net Selling Price/Unit, itemized deductions from gross sales taken to calculate Net Revenues or Net Trait Revenues as applicable, Sublicensing Revenues and amounts payable hereunder to the other Party for each such Revenue Product. Each Party (the "Audited Party") shall permit the other Party (the "Auditing Party"), by independent qualified public accountants engaged by the Auditing Party and reasonably acceptable to the Audited Party, to examine such books and records at any reasonable time, during business hours on a mutually agreeable date, but not later than [***] following the rendering of any corresponding reports, accountings and payments pursuant to Section 3.3. The foregoing right of review may be exercised only once during each [***] period and upon reasonable advance notice to the Audited Party. The opinion of said independent accountants regarding such reports, accountings and payments shall be binding on the Parties other than in the case of clear error. The Auditing Party shall bear the cost of any such examination and review; provided that if the inspection and audit shows an underpayment of royalties payable hereunder of more than [***] of the amount due for the applicable period, then Audited Party shall promptly reimburse Auditing Party for all costs incurred in connection with such examination and review with interest on the underpayment at the rate specified in subpart (e) below from the date such payment was originally due. The Audited Party shall promptly pay to the Auditing Party the amount of any underpayment revealed by an examination and review. Any overpayment by the Audited Party revealed by an examination and review shall be fully-creditable against future royalty payments owed hereunder by the Audited Party or reimbursed by the Auditing Party to the Audited Party, at the Audited Party's choice.

f. All payments made hereunder shall be made in U.S. Dollars by wire transfer to the account provided by the payee. Late payments shall be subject to interest at the rate of [***] per month. Any and all withholding or similar taxes imposed or levied on account of the payment of amounts under this Agreement, which are required to be withheld, shall be deducted by the payer prior to remittance and shall be paid to the proper taxing authority. Proof of payment shall be secured, if available, and sent to the payee as evidence of such payment in such form as required by the tax authorities having jurisdiction over the payer. Each Party agrees to cooperate with the other Party in claiming exemptions from such deductions or withholdings under any agreement or treaty from time to time in effect.

g. Each Party shall provide the other Party written notice within [***] days after achievement of a milestone set forth in this Section 3.3.

h. Within [***] days after the end of each calendar quarter during which Sublicensing Revenue is received by a Party or its Affiliate and/or Net Revenues or Net Trait Revenues is received by a Party or its Affiliate for a product for which a milestone in this Section 3.3 is based upon, [***] days after any calendar year in which any milestone based on Annual Net Revenue or Annual Net Trait Revenues for which a milestone in this Section 3.3 is based upon, such Party shall deliver a report to the other Party specifying in the aggregate and on Revenue Product-by-Revenue Product and country-by-country basis: (i) total gross invoiced amount from sales by the Party and its Affiliates of Revenue Products; (ii) amounts deducted by category from gross invoiced amounts to calculate Net Revenues; (iii) Net Revenues from sales of Revenue Products (iv) whether any milestones set forth in this Section 3.3 have been achieved; (v) Sublicensing Revenue received; (vi) Net Trait Revenue received and calculations showing in reasonable detail how Net Trait Revenue was determined (including the identity of the applicable comparable commercial products used in the such calculation, the Net Selling Price/Unit for the comparable commercial product and the Licensed Product or Pioneer Stacked CRISPR/Cas Product, and amounts deducted by category to determine such Net Trait Revenue received). Such reports shall be deemed to be the Confidential Information of the Party submitting it.

4. OWNERSHIP

4.1 Background Property. Each Party retains exclusive ownership and/or control of its respective Background Property, subject to the licenses and options expressly granted to the other Party under this Agreement.

4.2 Program IP. Inventorship of Program Intellectual Property shall be determined in accordance with United States law. Irrespective of inventorship, all right, title and interest to all patents and patent applications, including but not limited to U.S. and foreign patents and patent applications (including any substitutions, extensions, reexaminations and reissues, divisions, continuations or continuations-in-part thereof), plant variety protection certificates, and plant variety protection applications ("Program Patents"), within the Program IP shall be owned solely and exclusively by Pioneer (or DuPont, if so directed by Pioneer). For any Program IP having inventors of Caribou Bio and/or Caribou Bio Affiliates, Caribou Bio and/or such Caribou Bio Affiliates shall assign, and hereby assigns, their rights in such Program IP to Pioneer (or DuPont, if so directed by Pioneer). [***]

[***]

5. INTELLECTUAL PROPERTY, PATENTS.

[***]

5.3 Background IP. Each Party, at its own expense, shall control the preparation, drafting, filing, prosecution and maintenance of the patent and patent applications within its Background IP [***]

5.4 Infringement and Enforcement of Patent Rights.

[***]

c. DuPont Pioneer Background IP and Trade Secrets. [***]

d. Caribou Bio Background IP and Trade Secrets. [***]

e. Defense. [***]

f. Damages. [***]

g. Cooperation. [***]

h. Third Party Rights. [***]

6. RIGHTS AND LICENSES.

In consideration of each Party's contributions, rights and options granted, and payments due to the other Party under this Agreement, each Party grants to the other Party the licenses and options as set forth below:

[***]

6.3 Rights and Licenses Under Background Property.

a. Pioneer's Licenses and Rights Under Caribou Rio Background Property. Caribou Bio (on behalf of itself and its Affiliates) agrees to grant and hereby grants to Pioneer and Pioneer Affiliates:

i. (A) An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, exclusive, Worldwide license, with the right to grant and authorize Sublicenses subject to Section 6.3(a)(iv), under Caribou Bio's and Caribou Bio's Affiliates' rights in Caribou Bio Background IP, Caribou Bio Background Materials which are CRISPR Technology [***] and Caribou Bio Background Confidential Information to make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, transfer, have transferred, distribute, have distributed, import, have imported, export, have exported, and/or otherwise exploit products and/or perform methods and/or processes, or have them performed on Pioneer's behalf, in the Pioneer Agriculture Field. [***]

(B) An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, non-exclusive, Worldwide license, with the right to grant and authorize Sublicenses subject to Section 6.3(a)(iv), under Caribou Bio's and Caribou Bio's Affiliates' rights in Caribou Bio Background IP, Caribou Bio Background Materials which are CRISPR Technology [***] and Caribou Bio Background Confidential Information to make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, transfer, have transferred, distribute, have distributed, import, have imported, export, have exported, and/or otherwise exploit products and/or perform methods and/or processes, or have them performed on Pioneer's behalf, in the DuPont Pioneer Microorganisms Field, the DuPont Industrial Biotechnology Applications Field, and the DuPont Nutrition & Health Field.

ii. An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, non-exclusive, Worldwide license, with the right to grant Sublicenses subject to Section 6.3(a)(iv), under Caribou Bio's and Caribou Bio's Affiliates' lights in Caribou Bio Background IP, Caribou Bio Background Materials which are CRISPR Technology [***] and Caribou Bio Background Confidential Information to make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, transfer, have transferred, distribute, have distributed, import, have imported, export, have exported, and/or otherwise exploit products and/or perform methods and/or processes, or have them performed on Pioneer's behalf, in the Shared Non-Exclusive Field.

iii. An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, non-exclusive, Worldwide license, with the right to grant Sublicenses subject to Section 6.3(a)(iv), under Caribou Bio's and Caribou Bio's Affiliates' rights in Caribou Bio Background IP, Caribou Bio Background Materials which are CRISPR Technology [***] and Caribou Bio Background Confidential Information to make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, transfer, have transferred, distribute, have distributed, import, have imported, export, have exported, and/or otherwise exploit products and/or perform methods and/or processes, or have them performed on Pioneer's behalf, in the Shared Agricultural Non-Exclusive Field.

iv. [***]

b. Caribou Bio's Licenses and Rights Under DuPont Pioneer Background Property. Pioneer (on behalf of itself and its Affiliates) agrees to grant and hereby grants to Caribou Bio and Caribou Bio Affiliates:

[***] An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, exclusive, Worldwide license, with the right to grant and authorize Sublicenses subject to Section 6.3(b)(v), under Pioneer's and Pioneer's Affiliates' rights in DuPont Pioneer Background IP, DuPont Pioneer Background Materials which are CRISPR Technology (excluding Modified Pioneer Germplasm, Traits and Associated Intellectual Property) [***] and DuPont Pioneer Background Confidential Information to make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, transfer, have transferred, distribute, have distributed, import, have imported, export, have exported, and/or otherwise exploit products and/or perform methods and/or processes, or have them performed on Caribou Bio's behalf, [***] non-exclusive for the duration of the License Term in the Therapeutic Field [***] exclusive in the Research Tool Field. [***]

ii. An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, non-exclusive, Worldwide license, with the right to grant Sublicenses subject to Section 6.3(b)(v), under Pioneer's and its Affiliates' rights in DuPont Pioneer Background IP, DuPont Pioneer Background Materials which are CRISPR Technology (excluding Modified Pioneer Germplasm, Traits and Associated Intellectual Property) [***] and DuPont Pioneer Background Confidential Information to make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, transfer, have transferred, distribute, have distributed, import, have imported, export, have exported, and/or otherwise exploit products and/or perform methods and/or processes, or have them performed on Caribou Bio's behalf, in the Shared Non-Exclusive Field.

iii. An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, non-exclusive, Worldwide license, with the right to grant Sublicenses subject to Section 6.3(b)(v), under Pioneer's and its Affiliates' rights in DuPont Pioneer Background IP, DuPont Pioneer Background Materials which are CRISPR Technology (excluding Modified Pioneer Germplasm, Traits and Associated Intellectual Property) [***] and DuPont Pioneer Background Confidential Information to make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, transfer, have transferred, distribute, have distributed, import, have imported, export, have exported, and/or otherwise exploit products and/or perform methods and/or processes, or have them performed on Caribou Bio's behalf, in the Shared Agricultural Non-Exclusive Field.

iv. An irrevocable (subject to Article 9), non-assignable (subject to Section 12.3), non-transferable, Worldwide, non-exclusive license, with the right to grant and authorize Sublicenses subject to Section 6.3(b)(v), under Pioneer's and its Affiliates' rights in DuPont Pioneer Background IP, DuPont Pioneer Background Materials which are CRISPR Technology (excluding Modified Pioneer Germplasm, Traits and Associated Intellectual Property) [***] and DuPont Pioneer Background Confidential Information to make, have made, use, have used, import, have imported, export, and/or have exported products and/or perform methods and/or processes, or have them performed on Caribou Bio's behalf, in and for [***] for research use only in the CSF and SNF. [***]

[***]

6.4 Intentionally omitted.

6.5 Stacking Rights. Under the licenses granted to each Party and its Affiliates in this Article 6, such Parties and their Affiliates (and Sublicensees) shall have the right to combine or stack Program IP and/or the licensed Background IP, within the scope of their respective rights and licenses granted hereunder, with their own and/or with Third Party technologies and/or intellectual property.

[***]

6.7 [***]

7. CONFIDENTIALITY, PUBLICATION.

7.1 With respect to all Confidential Information, each Party agrees as follows:

a. each Party shall treat as confidential, not disclose to Third Parties and preserve the confidentiality of all Confidential Information of the other Party [***];

b. each Party ("receiving Party") shall use Confidential Information of the other Party ("disclosing Party") or any of its Affiliates (including but not limited to the disclosing Party's Background Confidential Information), [***] and/or for the practice of the licenses to the respective Confidential Information granted to such receiving Party under this Agreement, and shall exercise due care to prevent its unauthorized disclosure;

c. Notwithstanding Section 7.1(a) – (b), a Party may: (i) disclose Confidential Information of the other Party in connection with an order of a court or other government body or as otherwise required by or in compliance with law or regulation; provided that the disclosing Party (A) provides the other Party with notice of any such required disclosure in advance of such disclosure so that the disclosing Party may seek a protective order or other appropriate remedy, (B) discloses only that portion of the Confidential Information that it is advised by counsel that it is legally required to disclose, and (C) exercises reasonable efforts to cooperate with the disclosing Party should it seek to obtain a protective order or other assurance that confidential treatment will be accorded to such Confidential Information; (ii) [***] (iii) [***] (iv) [***]; so long as, in each case of the foregoing clauses (iii) and (iv), the person and/or Entity to which disclosure is made is subject to confidentiality and non-use obligations at least as protective as the obligations under this Agreement.

d. The obligation to maintain the disclosing Party's Confidential Information in confidence shall cease [***] after the Expiration or Termination of this Agreement. [***]

7.2 Permitted Disclosures of Confidential Information. Notwithstanding the provisions above or anything to the contrary, either Party may to the extent necessary, disclose and use Confidential Information disclosed to it by the other Party where the disclosure and use of the Confidential Information will be reasonably useful or necessary to the procurement, maintenance and enforcement of patent rights claiming Program IP in accordance with Sections 5.1, 5.2 and 5.4, provided that the other Party will have been notified of such disclosure and provided an opportunity to comment on such disclosure and such comments are reasonably considered by the Party procuring, maintaining or enforcing such patent rights.

7.3 Publication. [***]

8. REPRESENTATION AND WARRANTIES.

8.1 Caribou Bio Representations and Warranties. [***]

8.2 Pioneer Representations and Warranties. [***]

[***]

9. TERM AND TERMINATION, SURVIVAL

9.1 Expiration. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 9 or any other applicable provision of this Agreement, shall expire upon the expiration, abandonment or invalidation of the last patent or patent application within the Background IP or Program IP. [***]

9.2 Termination. This Agreement [***] may be terminated as follows:

a. Mutual Agreement. Upon mutual written agreement of the Parties, in which case all licenses granted hereunder shall terminate as of the effective date of such Termination and no further payments shall be due by either Party to the other Party. All obligations accrued prior to Termination, including obligations related to applicable provisions of Article 3, shall become due within [***] after Termination of this License Agreement.

b. Material Breach of Article 3. [***].

c. Failure to Own or Maintain IP. [***]. Such right to Terminate the Agreement [***] shall only apply in the event the non-breaching Party is materially adversely affected by the loss of such Control of such Background Intellectual Property [***].

d. Insolvency. A Party at its sole discretion may Terminate this Agreement by written notice, or continue to perform under the Agreement but terminate immediately upon written notice the other Party's licenses granted under Section 6.3 if, at any time:

i. the other Party makes an assignment for the benefit of creditors;

ii. any decree or order for relief is entered by a court of competent jurisdiction against the other Party under any bankruptcy, dissolution, liquidation or similar law;

iii. the other Party petitions or applies to any government tribunal of competent jurisdiction under bankruptcy law for, or consents to, the appointment of, or taking possession by, a trustee, receiver, custodian, liquidator or similar official, of such other Party or any substantial part of its assets, or commences a voluntary case under the bankruptcy law of any jurisdiction;

iv. any such petition or application is filed, or any such proceedings under bankruptcy law are commenced, against the other Party and such other Party by any act indicates its approval thereof, consents thereto, or acquiesces therein and such petition, application or proceedings are not dismissed, reversed or otherwise cured for more than [***], or an order, judgment or decree is entered under bankruptcy law appointing any such trustee, receiver, custodian, liquidator, or similar official, or approving the petition in any such proceedings, and such order for relief, order, judgment or decree remains unstayed and in effect for more than [***]; or

v. any order, judgment or decree is entered in any proceedings against the other Party under bankruptcy law decreeing the dissolution of such other Party and such order, judgment or decree remains unstayed and in effect for more than [***].

For purposes of Section 9.3(b) only, the other Party that satisfies any subpart Section 9.2(d)(i)-(v) shall be considered a breaching Party.

e. No Other Early Termination. Except as otherwise expressly set forth in this Agreement, no Party without the consent of the other may terminate this Agreement or any (sub)licenses granted hereunder, for any reason, including a material breach of this Agreement by the other Party, provided, however, that each Party will retain and may pursue any remedies for such breach that it may be entitled to in a court of law or equity, including damages and injunctive and equitable relief.

9.3 Effects of Expiration and Termination.

a. Upon Expiration or Termination (subject to Section 9.3(b)) of this Agreement, then each Party shall (i) return or destroy (and certify to such destruction) all copies of the other Party's Confidential Information that are in its possession provided that each Party may retain any Confidential Information of the other Party that is necessary to exercise any continuing rights (if any) after such Expiration or Termination; and (ii) [***]; provided, however, that all such licenses for both Parties shall become non-exclusive in the event of Expiration (but not Termination) unless otherwise mutually agreed to by the Parties.

b. Upon termination under Section 9.2(c) or (d) of a breaching Party's license under Section 6.3 by a non-breaching Party that continues to perform and satisfy all obligations under the Agreement, then:

i. the breaching party shall (i) return or destroy (and certify to such destruction) all copies of the non-breaching Party's Confidential Information that are in its possession provided that each Party may retain any Confidential Information of the other Party that is necessary to exercise any continuing rights (if any) after such Termination; and (ii) maintain no rights whatsoever under the licenses granted to such breaching Party by the non-breaching Party under Section 6.3 to Background Property.

ii. The non-breaching Party shall maintain all licenses granted to such non-breaching Party by the breaching Party under Article 6 of this Agreement until Expiration (or earlier Termination of this Agreement pursuant to Section 9.2).

iii. The non-breaching Party shall have the right at any time thereafter to Terminate the Agreement and cease performing thereunder by providing written notice to the breaching Party, at which time, the terms of Section 9.3(a) shall control.

9.4 Survival. All obligations or liability which accrued prior to Termination or Expiration of this Agreement shall survive the Termination or Expiration of this Agreement and remain in full effect. Articles/Sections 1, 2.8, 2.10 [***], 4, 5.1, 5.2, 5.3, 5.4(a) [***], 5.4(b), 5.4(g) [***], 6.2, 6.5, 7, 8.3, 9, 10, 11.1, 11.2, 11.3 and 12 (excluding the last sentence of Section 12.8) shall survive the Expiration and any Termination of this Agreement. Section 6.3 shall survive Expiration, but not Termination (subject to Section 9.2(c) and (d)), unless otherwise agreed to by the Parties. Except as otherwise provided in this Article 9, all other provisions of this Agreement shall terminate upon the Expiration or Termination of this Agreement. [***]

10. INDEMNIFICATION, LIMITATION OF LIABILITY

10.1 Each Party has sole discretion and responsibility for its activities under this Agreement, including the use, research, design, manufacture, and potential sale of products, methods and processes pursuant to this Agreement.

a. [***]

b. [***]

c. In connection with any Claim for which a Party (the "Indemnified Party") seeks indemnification from the other Party (the "Indemnifying Party") pursuant to this Agreement, the Indemnified Party shall: (a) give the Indemnifying Party prompt written notice of the Claim; provided, however, that failure to provide such notice shall not relieve the Indemnifying Party from its liability or

obligation hereunder, except to the extent of any material prejudice as a direct result of such failure; (b) cooperate with the Indemnifying Party, at the Indemnifying Party's expense, in connection with the defense and settlement of the Claim; and (c) permit the Indemnifying Party to control the defense and settlement of the Claim; provided, however, that the Indemnifying Party may not settle the Claim without the Indemnified Party's prior written consent, which shall not be unreasonably withheld or delayed, in the event such settlement materially adversely impacts, or would reasonably be expected to materially adversely impact, the Indemnified Party's rights or obligations. Further, the Indemnified Party shall have the right to participate (but not control) and be represented in any suit or action by advisory counsel of its selection and at its own expense.

[***]

11. CHANGE IN CONTROL, ACQUISITION

11.1 Acquiring Entity Property. Notwithstanding any other provision of this Agreement, in the event of an Acquisition of a Party ("Acquired Party"), such Acquisition shall not provide the other Party with an option, license, rights or access to, nor shall the Acquired Party's Background Property include: (a) any materials, information, Intellectual Property or other intellectual property rights or subject matter that was owned or controlled by the acquiring Entity or its Affiliates (other than that controlled by the Acquired Party and the Acquired Party's Affiliates prior to such Acquisition) (collectively, the "Acquiring Entities") prior to the Acquisition or (b) any materials, information, Intellectual Property or other intellectual property rights or subject matter that such Acquiring Entities develop or acquire after Acquisition independently without using any of the other Party's Background Property [***].

11.2 Treatment with respect to Identified Parties. In the event of an Acquisition of Caribou Bio by an Identified Party, Caribou Bio shall provide Pioneer with notice of such Acquisition within [***] business days after such Acquisition is finalized and the following shall apply:

[***]

d. Any Sublicense granted by Caribou Bio, its Affiliate or Sublicensee hereunder shall survive termination of Caribou Bio and its Affiliates' rights in the SNF and/or SANF as a result of an Acquisition of Caribou Bio by an Identified Party on condition that:

[***]

[***]

12. MISCELLANEOUS.

12.1 Notices. All notices, requests and other communications between the Parties hereunder shall be in writing, refer specifically to this Agreement and be deemed made as of the earlier of the date received or the second (2nd) day after mailing if given by registered, certified, or overnight mail, postage prepaid, and addressed to the Party at the address given below, or such other address as may later be designated by notice in writing:

If to Pioneer – contractual matters:	If to Pioneer – technical matters:
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

---Confidential---

[***]

If to Caribou Bio – contractual matters:	If to Caribou Rio – technical matters:
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	
[***]	
[***]	
[***]	
[***]	
[***]	

12.2 Publicity. Neither Party will use the name or trademarks of the other Party or of the other Party's Affiliates in any advertising, publicity, news release, product labeling, or for any promotional or commercial purpose, without the prior written consent of an authorized representative of the other Party. Notwithstanding the foregoing, the Parties agree to issue a joint press release in connection with the execution of this Agreement within a timeframe to be mutually agreed to by the Parties.

12.3 Assigns and Successors. [***]

12.4 Severability. If any provision hereof should be held invalid, illegal or unenforceable in any respect in any jurisdiction, then, to the fullest extent permitted by law: (i) all other provisions hereof will remain in full force and effect in such jurisdiction and will be liberally construed in order to carry out the intentions of the Parties hereto as nearly as may be possible; and (ii) such invalidity, illegality or unenforceability will not affect the validity, legality or enforceability of such provision in any other jurisdiction. To the extent permitted by applicable law, the Parties hereby waive any provision of law that would render any provision hereof prohibited or unenforceable in any respect.

12.5 No Implied Waivers; Rights Cumulative. No failure on the part of either Party to exercise and no delay in exercising any right, power, remedy, or privilege under this Agreement, or provided by statute or law, or in equity or otherwise, including, without limitation, the right or power to terminate this Agreement, will impair, prejudice, or constitute a waiver of any such right, power, remedy, or privilege or be construed as a waiver of any breach of this Agreement or as an acquiescence therein, nor will any single or partial exercise of any such right, power, remedy, or privilege preclude any other or further exercise thereof or the exercise of any right, power, remedy, or privilege, except as otherwise provided for herein.

12.6 Force Majeure. Neither Party shall be responsible to the other Party for damages or breach of this Agreement, or for delay or failure in performance of any of the obligations imposed by this Agreement, if the delay or failure is occasioned by a cause beyond the reasonable control of (and without the fault or negligence of), the Party, such as fire, flood, explosion, lightning, windstorm, earthquake, subsidence of soil, failure of equipment or supply of materials, court order or interference by other authorized government officials, riot or war. The Party seeking such relief shall (a) take all reasonable steps to overcome or minimize such delay or failure in performance as promptly as is practical; (b) promptly notify the other Party of the nature and particulars thereof and expected duration of the delay or failure of performance; (c) promptly notify the other Party when the cause beyond its reasonable control no longer is causing delay or failure in performance; and (d) quickly continue performance when these causes are removed. Notwithstanding the foregoing, in the event such Force Majeure circumstance or event causes a delay beyond a period exceeding [***] days from the date such performance would have been due but for such circumstance or event, the Party not delayed in its performance shall have the right to terminate this Agreement with written notice to such Party.

12.7 Independent Contractors. The Parties are independent contractors, and no agency, partnership, franchise, joint venture or employment relationship is intended or created by this Agreement.

12.8 Regulatory. Each Party shall have the exclusive responsibility and exclusive right, without limitation, to seek any registrations, clearances, approvals or deregulations relevant to such Party's applicable fields ("Regulatory Clearance"), including the right to conduct all supporting studies and to generate any new data or information, on any biological materials produced by or for such Party or its Affiliates under this Agreement. [***]

12.9 Export Control. It is understood that United States laws and regulations control the export of certain technical data, computer software, laboratory prototypes and other commodities. The Parties each acknowledge that the transfer of certain technical data and commodities to foreign countries and/or foreign nationals may require a license from one or more agency(ies) of the United States Government. The Parties each agree that it (including its Affiliates) shall not export or disclose any technology (Materials or Confidential Information) to any foreign countries or foreign entities without prior approval of such agency, if such approval is required by law or regulation.

12.10 Amendments. No amendment, modification, waiver, termination or discharge of any provision of this Agreement, nor consent to any departure by either Party therefrom, will in any event be effective unless the same is in writing, specifically identifies this Agreement and the provision intended to be amended, modified, waived, terminated or discharged, and is signed by both Parties or in the case of a waiver, signed by the party waiving its light or the other Party's obligation. Each such amendment, modification, waiver, termination, or discharge will be effective only in the specific instance and for the specific purpose for which given. No provision of this Agreement will be varied, contradicted, or explained by any oral agreement, course of dealing or performance, or any other matter not set forth in an agreement in writing and signed by both Parties.

12.11 Further Assurances. Each Party will duly execute and deliver, or cause to be duly executed and delivered, such further instruments, and do and cause to be done such further acts and things, including without limitation, the filing of such additional assignments, agreements, documents, and instruments, that may be reasonably necessary or as the other Party hereto may at any time and from time to time reasonably request in connection with this Agreement, or to carry out more effectively the provisions and purposes of this Agreement, or to better assure and confirm unto such other Party its rights and remedies under this Agreement.

12.12 Governing Law. This Agreement is acknowledged to have been made and will be construed in accordance with the laws of the State of New York, and the [***] shall have exclusive jurisdiction over all legal matters and proceedings hereunder unless the Parties mutually agree in writing (each at its own discretion) to an alternative court jurisdiction, provided that all questions concerning the construction or effect of patent applications, patents, plant variety protection applications, or plant variety protection certificates will be decided in accordance with the laws of the country in which the particular patent application, patent, plant variety protection application, or plant variety protection certificate concerned has been filed or granted, as the case may be.

12.13 Dispute Resolution.

[***]

c. [***]

12.14 Headings. Headings used herein are for convenience only and will not in any way affect the construction of this Agreement, or be taken into consideration in interpreting this Agreement.

12.15 Entire Agreement. This Agreement constitutes, on and as of the Effective Date, the entire agreement and understanding of the Parties [***] and related matters contained herein, and supersedes all previous agreements and understandings, whether written or oral, with respect thereto.

12.16 Counterparts. This Agreement may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

[Signature Page Follows]

---Confidential---

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized representatives,

Pioneer Hi-Bred International, Inc.

By: /s/ Paul E. Schickler
Name: Paul E. Schickler
Title: President

Date: July 11, 2015

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: July 13, 2015

[Signature Page to Amended and Restated Collaboration and License Agreement)

Appendix A

[***]

Appendix B

[***]

Appendix C

[***]

Appendix D
Caribou Bio Background IP

CARIBOU LICENSED AND OWNED PATENTS

[***]

Appendix E
DuPont Pioneer Background IP

[***]

Appendix F
Copy of the UC/Vienna License

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.8

AMENDMENT #1 to the
AMENDED AND RESTATED
COLLABORATION AND LICENSE AGREEMENT

THIS AMENDMENT #1 ("Amendment"), effective January 21, 2016 ("Amendment Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 120, 'Berkeley, California 94710 ("Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party", and together the "Parties").

WHEREAS, the Parties have signed an Amended and Restated Collaboration and License Agreement, which as of July 13, 2015, [***] "Agreement" refers to the Amended and Restated Collaboration and License Agreement; and

WHEREAS, the Parties desire to amend the Agreement to clarify certain provisions and provide updates to certain Appendices of the Agreement;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment shall have the meanings set forth in the Agreement.

[***]

3. In Section 6.2(a)(iv) of the Agreement, the phrase "DuPont Pioneer Bio Background IP" is deleted and replaced with "DuPont Pioneer Background IP" as of the Effective Date.

4. Section 6.6(a) is deleted in its entirety and replaced with the following Section 6.6(a) as of the Effective Date:

6.6 [***]

5. Appendix E of the Agreement is hereby amended to append the following:

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

6. Appendix D-1 (Updated Caribou Bio Background IP as of the Amendment Effective Date) and Appendix E-1 (Updated DuPont Pioneer Background IP as of the Amendment Effective Date) attached hereto arc appended to the Agreement.

7. Appendix H sets forth the Program IP (as defined in Section 1.43(c)) of the Agreement as of the Amendment Effective Date,

8. All other terms of the Agreement remain in full force and effect.

9. This Amendment may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF. the Parties have caused this Amendment #1 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.

By: /s/ Paul E. Schickler
Name: Paul E. Schickler
Title: President

Date: January 22, 2016

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: January 21, 2016

Appendix E-1
DuPont Pioneer Background IP
as of the Amendment Effective Date

[***]

APPENDIX H
PROGRAM IP
As of the Amendment Effective Date

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.9

AMENDMENT #2 to the AMENDED AND RESTATED COLLABORATION AND LICENSE AGREEMENT

This Amendment #2 to the Amended and Restated Collaboration and License Agreement ("Amendment"), effective July 18, 2016 (the "Amendment #2 Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 105, Berkeley, California 94710 ("Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party", and together the "Parties").

WHEREAS, the Parties have signed an Amended and Restated Collaboration and License Agreement dated July 13, 2015 (which as of July 13, 2015, [***] as amended by Amendment #1 to the Amended and Restated Collaboration and License Agreement, dated January 21, 2016. As used in this Amendment, "Agreement" refers to the Amended and Restated Collaboration and License Agreement, as amended; and

WHEREAS, the Parties desire to further amend the Agreement to clarify certain effects of termination of the Agreement;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment shall have the meanings set forth in the Agreement.

2. Section 9.3 of the Agreement is hereby amended to include the following Subsection 9.3(c) as of the Amendment #2 Effective Date:

"c. [***]

3. Section 12.3 of the Agreement is hereby replaced in its entirety with the following: "Assigns and Successors.

[***]

4. All other terms of the Agreement remain in full force and effect.

5. This Amendment may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed and original instrument, and all of which, together, shall constitute one and the same executed Agreement.

IN WITNESS WHEREOF, the Parties have caused this Amendment #2 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.

By: /s/ Mathias L. Müller
Name: Mathias L. Müller
Title: Director, Business Development

Date: July 25, 2016

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: July 27, 2016

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.10

AMENDMENT #3 to the
AMENDED AND RESTATED
COLLABORATION AND LICENSE AGREEMENT

This Amendment #3 to the Amended and Restated Collaboration and License Agreement ("Amendment"), effective March 13, 2017 (the "Amendment #3 Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 105, Berkeley, California 94710 ("Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party", and together the "Parties").

WHEREAS, the Parties have signed an Amended and Restated Collaboration and License Agreement dated July 13, 2015 (which as of July 13, 2015, [***] as amended by Amendment #1 to the Amended and Restated Collaboration and License Agreement, dated January 21, 2016 ("Amendment #1), and Amendment #2 to the Amended and Restated Collaboration and License Agreement, dated July 18, 2016. As used in this Amendment, "Agreement" refers to the Amended and Restated Collaboration and License Agreement, as amended; and

WHEREAS, the Parties desire to further amend the Agreement to provide an update to an Appendix of the Agreement;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment shall have the meanings set forth in the Agreement.
2. Page 6 of Amendment #1 is hereby deleted in its entirety and replaced with the attached schedule setting forth the patent family owned by The Regents of the University of California/University of Vienna/Emmanuelle Charpentier entitled "Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription."
3. All other terms of the Agreement remain in full force and effect.
4. This Amendment may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

IN WITNESS WHEREOF, the Parties have caused this Amendment #3 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.

By: /s/ Mathias L. Müller
Name: Mathias L. Müller
Title: Director, Business Development

Date: May 5, 2017

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: May 9, 2017

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.11

AMENDMENT #4 to the
AMENDED AND RESTATED
COLLABORATION AND LICENSE AGREEMENT

This Amendment #4 to the Amended and Restated Collaboration and License Agreement ("Amendment"), effective June 26, 2017 (the "Amendment #4 Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 105, Berkeley, California 94710 ('Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party", and together the ''Parties").

WHEREAS, the Parties have signed an Amended and Restated Collaboration and License Agreement dated July 13, 2015 (which, as of July 13, 2015, [***] as amended by Amendment# I to the Amended and Restated Collaboration and License Agreement, dated January 21, 2016; Amendment #2 to the Amended and Restated Collaboration and License Agreement, dated July 18, 2016; and Amendment #3 to the Amended and Restated Collaboration and License Agreement, dated March 13, 2017 (collectively, the ''Agreement"); mid

WHEREAS, the Parties desire to further amend the Agreement to clarify certain aspects of sublicensing by the Parties in the Agreement;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment shall have the meanings set forth in the Agreement.

2. Sections 6.3(a)(iv) is hereby amended to introduce the following phrase at the beginning of Section 6.3(a)(iv):

   [***]

3. Section 6.3(a) is hereby amended to include the following Subsection 6.3(a)(v):

   [***]

4. Sections 6.3(b)(v) is hereby amended to introduce the following phrase at the beginning of Section 6.3(b)(v):

   [***]

5. Section 6.3(b) is hereby amended to include the following Subsection 6.3(b)(vi):

   [***]

6. All other terms of the Agreement remain in full force and effect.

7. This Amendment may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

[Signature Page Follows}

IN WITNESS WHEREOF, the Parties have caused this Amendment #4 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.

By: /s/ Mathias L. Müller
Name: Mathias L. Müller
Title: Director, Business Development

Date: June 26, 2017

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: June 26, 2017

Exhibit 10.12

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

AMENDMENT #5 to the
AMENDED AND RESTATED
COLLABORATION AND LICENSE AGREEMENT

This Amendment #5 to the Amended and Restated Collaboration and License Agreement ("Amendment #5"), effective May 25, 2018 (the "Amendment #5 Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 105, Berkeley, California 94710 ("Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party," and together the "Parties").

WHEREAS, the Parties have a signed an Amended and Restated Collaboration and License Agreement dated July 13, 2015 (which, as of July 13, 2015, [***] as amended by Amendment #1 to the Amended and Restated Collaboration and License Agreement, dated January 21, 2016; Amendment #2 to the Amended and Restated Collaboration and License Agreement, dated July 18, 2016; Amendment #3 to the Amended and Restated Collaboration and License Agreement, dated March 13, 2017; and Amendment #4 to the Amended and Restated Collaboration and License Agreement, dated June 26, 2017 (collectively, the "Agreement"); and

WHEREAS, the Parties desire to further amend the Agreement to provide updates to certain Appendices of the Agreement;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment #5, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment #5 shall have the meanings set forth in the Agreement.
2. Appendix D-2 (Updated Caribou Bio Background IP as of the Amendment #5 Effective Date), Appendix E-2 (Updated DuPont Pioneer Background **IP** as of the Amendment #5 Effective Date), and Appendix H-1 (Updated Program IP as of the Amendment #5 Effective Date), all attached hereto, are appended to the Agreement.
3. Appendix I attached hereto sets forth the Caribou Bio Additional IP, as defined in Section 6.7 of the Agreement.
4. Except as explicitly set forth in this Amendment #5, no other terms of the Agreement are amended and all other such terms of the Agreement shall remain in full force and effect.
5. This Amendment #5 may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

IN WITNESS WHEREOF, the Parties have caused this Amendment #5 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.		**Caribou Biosciences, Inc.**	
By:	/s/ Anne Pitts	By:	/s/ Rachel E. Haurwitz
Name:	Anne Pitts	Name:	Rachel E. Haurwitz
Title:	Licensing Manager	Title:	President and CEO
Date:	May 30, 2018	Date:	June 3, 2018

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.13

AMENDMENT #6 to the
AMENDED AND RESTATED
COLLABORATION AND LICENSE AGREEMENT

This Amendment #6 to the Amended and Restated Collaboration and License Agreement ("Amendment #5"), effective June 2, 2019 (the "Amendment #6 Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62" Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 105, Berkeley, California 94710 ("Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party," and together the "Parties").

WHEREAS, the Parties have a signed an Amended and Restated Collaboration and License Agreement dated July 13, 2015 (which, as of July 13, 2015, [***] as amended by Amendment #1 to the Amended and Restated Collaboration and License Agreement, dated January 21, 2016; Amendment #2 to the Amended and Restated Collaboration and License Agreement, dated July 18, 2016; Amendment #3 to the Amended and Restated Collaboration and License Agreement, dated March 13, 2017; Amendment #4 to the Amended and Restated Collaboration and License Agreement, dated June 26, 2017; and Amendment #5, dated May 26, 2018 (collectively, the "Agreement"); and

WHEREAS, the Parties desire to further amend the Agreement in light of certain corporate changes relating to Pioneer;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment #5, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment #6 shall have the meanings set forth in the Agreement.

2. At the end of Section 6.3(a)(iv) of the Agreement, the following is added to the end of the section:

   [***]

[***]

4. Nothing in this Amendment #6 is intended to modify or restrict any rights or obligations in the Agreement to any other intellectual property, including Program IP, as defined in Section 1.43 of the Agreement, nor the licenses granted by each Party to the other Party under such Program IP, as set forth in the Agreement.

5. Except as explicitly set forth in this Amendment #6, no other terms of the Agreement are amended and all other such terms of the Agreement shall remain in full force and effect.

6. This Amendment #6 may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

IN WITNESS WHEREOF, the Parties have caused this Amendment #6 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.

By: /s/ Mathias L. Müller
Name: Mathias L. Müller
Title: Director, Business Development

Date: June 26, 2019

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: June 28, 2019

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.14

AMENDMENT #7 to the AMENDED AND RESTATED COLLABORATION AND LICENSE AGREEMENT

This Amendment #7 to the Amended and Restated Collaboration and License Agreement ("Amendment #7"), dated December 18, 2020 (the "Amendment #7 Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 105, Berkeley, California 94710 ("Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party," and together the "Parties").

WHEREAS, the Parties have a signed an Amended and Restated Collaboration and License Agreement dated July 13, 2015 (which, as of July 13, 2015, [***] as amended by Amendment #1 to the Amended and Restated Collaboration and License Agreement, dated January 21, 2016; Amendment #2 to the Amended and Restated Collaboration and License Agreement, dated July 18, 2016; Amendment #3 to the Amended and Restated Collaboration and License Agreement, dated March 13, 2017; Amendment #4 to the Amended and Restated Collaboration and License Agreement, dated June 26, 2017; Amendment #5 to the Amended and Restated Collaboration and License Agreement, dated May 26, 2018; and Amendment #6 to the Amended and Restated Collaboration and License Agreement, dated June 2, 2019 (collectively, the "Agreement"); and

WHEREAS, the Parties desire to further amend the Agreement for clarification;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment #7, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment #7 shall have the meanings set forth in the Agreement.

2. New Section 9.3(c), added by Amendment #2, dated July 19, 2016 is hereby deleted in its entirety and replaced with the following Section 9.3(c), effective as of July 19, 2016:

   [***]

3. Section 9.2(b) of the Agreement hereby deleted in its entirety and replaced with the following Section 9.2(b), effective as of the Amendment #7 Effective Date:

   [***]

4. Except as explicitly set forth in this Amendment #7, no other terms of the Agreement are amended and all other such terms of the Agreement shall remain in full force and effect.

5. This Amendment #7 may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

IN WITNESS WHEREOF, the Parties have caused this Amendment #7 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.

By: /s/ Neal Gutterson
Name: Neal Gutterson
Title: Chief Technology Officer

Date: December 22, 2020

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: December 21, 2020

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.15

AMENDMENT #8 to the
AMENDED AND RESTATED
COLLABORATION AND LICENSE AGREEMENT

This Amendment #8 to the Amended and Restated Collaboration and License Agreement ("Amendment #8"), effective December 18, 2020 (the "Amendment #8 Effective Date"), is by and between Pioneer Hi-Bred International, Inc., with headquarters at 7100 NW 62nd Avenue, PO Box 1014, Johnston, Iowa 50131-1014, USA ("Pioneer"), and Caribou Biosciences, Inc., located at 2929 7th St., Suite 105, Berkeley, California 94710 ("Caribou Bio") (Caribou Bio and Pioneer, each individually a "Party," and together the "Parties").

WHEREAS, the Parties have a signed an Amended and Restated Collaboration and License Agreement dated July 13, 2015 (which, as of July 13, 2015, [***] as amended by Amendment #1 to the Amended and Restated Collaboration and License Agreement, dated January 21, 2016; Amendment #2 to the Amended and Restated Collaboration and License Agreement, dated July 18, 2016; Amendment #3 to the Amended and Restated Collaboration and License Agreement, dated March 13, 2017; Amendment #4 to the Amended and Restated Collaboration and License Agreement, dated June 26, 2017; Amendment #5 to the Amended and Restated Collaboration and License Agreement, dated May 26, 2018; Amendment #6 to the Amended and Restated Collaboration and License Agreement, dated June 2, 2019; and Amendment #7 to the Amended and Restated Collaboration and License Agreement, dated December 18, 2020 (collectively, the "Agreement"); and

WHEREAS, the Parties wish to further amend the Agreement.

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment #8, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. All capitalized terms not defined in this Amendment #8 shall have the meanings set forth in the Agreement.

2. Pioneer and Caribou Bio each acknowledge and agree that the Research Program ended on December 31, 2016 and that the Program IP resulting from the Research Program consists [***] of one patent family that is directed to CRISPR hybrid RNA-DNAs (chRDNAs) as set forth on Exhibit A attached hereto (the "chRDNA Patent Family") and, as of the Amendment #8 Effective Date, the terms "Program IP," "Program Intellectual Property," and "Program Patents" shall refer only to the chRDNA Patent Family.

[***]

4. Section 1.50 of the Agreement is hereby deleted in its entirety and replaced with the following Section 1.50:

"1.50 "Revenue Product means a Licensed Product."

5. New Sections 1.64 and 1.65 are hereby added to the Agreement:

"1.64 "Revenue chRDNA Therapeutic Product" means a Licensed Product sold in the Therapeutic Field.

1.65 "Revenue chRDNA Product" means a therapeutic product produced directly from a Licensed Product sold in the Therapeutic Field."

6. Notwithstanding Section 4.2 of the Agreement and in exchange for consideration as set forth in Paragraph 10 below, Pioneer agrees to assign, and hereby does assign, to Caribou Bio and Caribou Bio hereby accepts all of Pioneer's right, title, and interest in and to the Program IP (the "Assignment"). [***] Pioneer makes no representation or warranty, either express or implied, to any right, title, or interest transferred by the listed inventors of the Program IP to Caribou Bio.

7. Pioneer's existing exclusive rights to Program IP in the DuPont Pioneer Strategic Field and non-exclusive rights in the Shared Non-Exclusive Field and Shared Agricultural Non- Exclusive Field, and the ability to grant Sublicenses, as set forth in Section 6.2(a)(i)-(iv) of the Agreement, remain in full force and effect; and Caribou Bio's existing exclusive rights to Program IP in the Caribou Bio Strategic Field and non-exclusive rights in the Shared Non-Exclusive Field, the Shared Agricultural Non-Exclusive Field, and for [***], and the ability to grant Sublicenses, as set forth in Section 6.2(b)(i)-(v) of the Agreement, remain in full force and effect.

8. [***]

9. [***]

10. As consideration for the Assignment of the Program IP by Pioneer to Caribou Bio and the Covenant Not to Sue set forth above, Caribou Bio shall:

    (a) within thirty (30) calendar days of the Amendment #8 Effective Date, pay Pioneer an Assignment fee of Five Hundred Thousand U.S. Dollars ($500,000) [***];

    [***]

    (c) pay to Pioneer the commercial milestone payments set forth in Section 3.3(b)(i)(1)-(7), as applicable, of the Agreement for Revenue chRDNA Therapeutic Products of Caribou Bio, its Affiliates, or any Sublicensee under a Sublicense, as may be amended; except that (i) no commercial milestone payments shall be due for Revenue chRDNA Therapeutic Products of Caribou Bio Sublicensees under Sublicenses, as may be amended, entered into before the Amendment #8 Effective Date, as set forth on Exhibit C attached hereto, and [***]; and

    (d) pay to Pioneer the Sublicensing Revenues set forth in Section 3.3(c) of the Agreement in the Therapeutic Field for any Sublicensing Revenues received under a Sublicense for Revenue chRDNA Therapeutic Products and/or Revenue chRDNA Products, as such Sublicense may be amended, except that no Sublicensing Revenues shall be due for any Sublicense, as may be amended, entered into before the Amendment #8 Effective Date, as set forth on Exhibit C attached hereto.

11. The payments due under Paragraph 10 above are subject to Section 9.2(b), as amended, of the Agreement.

12. Except as explicitly set forth in this Amendment #8, no other terms of the Agreement are amended, and all other such terms of the Agreement shall remain in full force and effect.

13. This Amendment #8 may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile, or scanned PDF document shall be deemed an original instrument, and all of which, together, shall constitute one and the same executed Agreement.

IN WITNESS WHEREOF, the Parties have caused this Amendment #8 to the Amended and Restated Collaboration and License Agreement to be executed by their respective authorized representatives.

Pioneer Hi-Bred International, Inc.

By: /s/ Neal Gutterson
Name: Neal Gutterson
Title: Chief Technology Officer

Date: December 22, 2020

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and CEO

Date: December 21, 2020

Exhibit A

chRDNA Patent Family

[***]

Exhibit B

[***]

Exhibit C

Pre-Existing Sublicenses to Program IP

[***]

Exhibit 10.16

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Execution Copy

LICENSE AGREEMENT

This License Agreement (this "Agreement"), dated as of July 16, 2014 (the "Effective Date"), is made by and between Caribou Biosciences, Inc., a Delaware corporation ("Caribou") and Intellia, LLC, a Delaware limited liability company ("Intellia"). Each of Caribou and Intellia may be referred to herein as a "Party" or together as the "Parties."

WHEREAS, Caribou owns and has rights to certain Patents and technology relating to researching, developing and commercializing cellular engineering technologies, including CRISPR/Cas9 Technology (as such capitalized terms are defined hereinafter);

WHEREAS, Atlas Ventures or its Affiliates and other investors are willing to invest in an entity to Exploit Product Candidates and Products in the Intellia Field and Atlas Ventures and Caribou have cooperated to form Intellia as such an entity to do so (such creation of Intellia, the series of transactions by which the ownership interest in Intellia will be contributed to Intellia Therapeutics, Inc., a wholly-owned subsidiary of Intellia Therapeutics, LLC, the merger of Intellia with Intellia Therapeutics, Inc. in which Intellia Therapeutics, Inc. will be the surviving entity, and the investment in Intellia Therapeutics, LLC, the "Spinout Transaction"); and

WHEREAS, the Parties desire to enter into an agreement pursuant to which Caribou will grant an exclusive, worldwide license to Intellia under the Caribou IP to Exploit Product Candidates and Products in the Intellia Field and Intellia will grant an exclusive, worldwide license to Caribou under the Intellia IP to Exploit Intellia IP in the Caribou Field (as such capitalized terms are defined hereinafter), all on the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the amount and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Definitions. The following terms and their correlatives when capitalized will have the meanings set forth below:

1.1 "Affiliate" of a Person means any other Person which (directly or indirectly) is controlled by, controls or is under common control with such Person, but only for so long as such entity is controlled by, controls or is under common control with such Person. For purposes of this definition, "control" (including the terms "controlled by" and "under common control with"), with respect to the relationship between or among two or more Persons, shall mean (a) with respect to a corporate entity direct or indirect ownership of fifty percent (50%) or more (or, if less than fifty percent (50%), the maximum ownership interest permitted by applicable Law) of the stock or shares having the right to vote for the election of directors of such corporate entity or (b) with respect to an entity that is not a corporation the power to direct or cause the direction of the affairs or management of a Person, whether through the ownership of voting securities, as trustee, personal representative or executor, by contract or otherwise, including, without limitation, the ownership, directly or indirectly, of securities having the power to elect a majority of the board of directors or similar body governing the affairs of such Person; provided however that, pursuant to a Caribou and Intellia written agreement, "Affiliate" may also include joint ventures, whether corporations or not, between a Party and one or more other Persons formed to Exploit one or more Products or Product Candidates (and related activities) [***].

1.2 "Bankruptcy Event" means, with respect to a Party:

(a) the entry by a court of competent jurisdiction of: (i) a decree or order for relief in respect of a Party in an involuntary case or proceeding under any Bankruptcy Law or (ii) a decree or order (A) adjudging a Party bankrupt or insolvent, (B) approving as properly filed a petition seeking reorganization, arrangement, adjustment or

composition of, or in respect of, a Party under any Bankruptcy Law, (C) appointing a custodian of a Party or of any substantial part of the property of a Party, or (D) ordering the winding-up or liquidation of the affairs of a Party, and in each case, the continuance of any such decree or order for relief or any such other decree or order remains unstayed and in effect for a period of [***] days; or

(b) (i) the commencement by a Party of a voluntary case or proceeding under any Bankruptcy Law or of any other case or proceeding to be adjudicated as bankrupt or insolvent, (ii) the consent by a Party to the entry of a decree or order for relief in respect of such Party in an involuntary case or proceeding under any Bankruptcy Law or to the commencement of any bankruptcy or insolvency case or proceeding against such Party, (iii) the filing by a Party of a petition or answer or consent seeking reorganization or relief under any Bankruptcy Law, (iv) the consent by a Party to the filing of such petition or to the appointment of or taking possession by a custodian of such Party or of any substantial part of the property of such Party, (v) the making by a Party of an assignment for the benefit of creditors, (vi) the admission by a Party in writing of its inability to pay its debts generally as they become due, or (vii) the approval by stockholders of a Party of any plan or proposal for the liquidation or dissolution of such Party.

1.3 "Bankruptcy Law" means Title 7 or Title 11, U.S. Code, or any similar federal, state or foreign law for the relief of debtors.

1.4 "BLA" means a Biologics License Application filed with the FDA or an equivalent application to any Regulatory Authority (including an NDA or its foreign equivalent) requesting Regulatory Approval for a new therapeutic product, including for a Product.

1.5 "Breached In-License" has the meaning set forth in Section 7.2.

1.6 "Caribou Field" means any and all uses and applications outside of the Intellia Field.

1.7 "Caribou In-Licenses" means, collectively, the Caribou Pre-Existing In-Licenses and the Caribou Included In-Licenses.

1.8 "Caribou Included In-License" has the meaning set forth in Section 2.7(a).

1.9 "Caribou Indemnitees" has the meaning set forth in Section 6.6(a).

1.10 "Caribou IP" means all Patents (including those set forth on Exhibit B) and Know-How Controlled by Caribou or any of its Affiliates (including pursuant to Caribou In-Licenses) as of the Effective Date or at any time during the Term prior to the IP Cutoff Date, directed to or comprising site-specific genome engineering using CRISPR/Cas9 Technology that are necessary or useful to Develop, Manufacture or Commercialize Products and/or Product Candidates in the Intellia Field and (b) any and all Technology (as defined under the Service Agreement) developed by Caribou under the Services Agreement (including such Patents and Know-How).

1.11 "Caribou New In-Licenses" means a New In-License between Caribou or any of its Affiliates and a Third Party.

1.12 "Caribou Patents" means all Patents within the Caribou IP.

1.13 "Caribou Pre-Existing In-Licenses" means the agreements set forth on Exhibit A, as such agreements may be amended or restated.

1.14 "Cas9 Protein" means [***].

1.15 "Change of Control" means, with respect to a Party: (a) the sale of all or substantially all of such Party's assets or business (in one transaction or a series of related transactions); (b) a merger, reorganization or consolidation involving such Party in which the stockholders of the Party, immediately prior to the merger, reorganization or consolidation, would not, immediately after the merger, reorganization or consolidation, "beneficially own" (as such term is defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended), directly or indirectly, shares

representing in the aggregate more than fifty percent (50%) of the combined voting power of the entity issuing cash or securities in the merger, reorganization or consolidation (or of its ultimate parent entity, if any); or (c) a person or entity becomes the "beneficial owner" (as defined above) of more than fifty percent (50%) of the voting securities of such Party, other than directly from such Party [***].

1.16 "Commercialize" or "Commercialization" means [***].

1.17 "Confidential Information" has the meaning set forth in Section 5.1.

1.18 "Control" or "Controlled" means, with respect to any Know-How or Patent, the possession (whether by ownership or license or sublicense) by a Party of the ability to use or practice such Know-How or Patent to grant to the other Party a license or access as provided herein to such item, without violating the terms of any agreement or other arrangement with, or the rights of, any Third Party. [***].

1.19 "CRISPR/Cas9 Technology" means [***].

1.20 "Cross-Licensed Patents" means the Caribou Patents and the Intellia Patents. A Party's Cross-Licensed Patents are, for Caribou, the Caribou Patents and, for Intellia, the Intellia Patents.

1.21 "Develop" or "Development" means any and all research and preclinical and clinical drug development activities, including: research, test method development and stability testing, toxicology, formulation, optimization, modification, enhancement, improvement, process development, qualification and validation, Manufacture scale-up, development-stage Manufacturing, quality assurance/quality control, clinical studies, statistical analysis and report writing, the preparation and submission of Regulatory Filings, regulatory affairs with respect to the foregoing and all other activities necessary or useful or otherwise requested or required by a Regulatory Authority as a condition or in support of obtaining or maintaining a Regulatory Approval.

1.22 "Disclosing Party" has the meaning set forth in Section 5.1.

1.23 "Disputes" has the meaning set forth in Section 8.1.

1.24 "EMA" means the Regulatory Authority known as either the European Medicines Agency or the European Agency for the Evaluation of Medicinal Products and any successor agency thereto.

1.25 "Executive Officer" means [***]. Either Party may change its Executive Officer upon written notice to the other Party [***].

1.26 "Exploit" means, with respect to any subject matter, to make, have made, import, use, sell, offer for sale, Develop, Manufacture, Commercialize and otherwise exploit such subject matter.

1.27 "Extensions" has the meaning set forth in Section 4.1(f).

1.28 "FDA" means the United States Food and Drug Administration and any successor agency thereto.

1.29 "Governmental Authority" means any United States federal, state or local or any foreign government, or political subdivision thereof, or any multinational organization or authority or any authority, agency or commission entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power, any court or tribunal (or any department, bureau or division thereof), or any governmental arbitrator or arbitral body.

1.30 "IP Cutoff Date" means [***].

1.31 "Included In-License Addendum" has the meaning set forth in Section 2.7(a).

1.32 "In-License Addendum" has the meaning set forth in Section 2.7(d).

1.33 “In-License Election Notice” has the meaning set forth in Section 2.7(a).

1.34 “In-License Sublicensee Party” has the meaning set forth in Section 2.7(a).

1.35 “In-Licensing Party” has the meaning set forth in Section 2.7(a).

1.36 “Intellia Field” means any and all therapeutic, prophylactic and palliative uses and applications for [***] diseases and conditions in humans using CRISPR/Cas9 Technology [***], and companion diagnostics for Product or Product Candidates. [***].

1.37 “Intellia Included In-Licenses” has the meaning set forth in Section 2.7(a).

1.38 “Intellia Indemnitees” has the meaning set forth in Section 6.6(b).

1.39 “Intellia IP” means all Patents and Know-How Controlled by Intellia or any of its Affiliates (including pursuant to Intellia Included In-Licenses) as of the Effective Date or at any time during the Term prior to the IP Cutoff Date, in each case, directed to or comprising site-specific genome engineering using CRISPR/Cas9 Technology that are necessary or useful to Develop, Manufacture or Commercialize products in the Caribou Field.

1.40 “Intellia Molecular Target” means any and all Molecular Targets [***].

1.41 “Intellia New In-Licenses” means a New In-License between Intellia or any of its Affiliates and a Third Party.

1.42 “Intellia Patents” means all Patents within the Intellia IP.

1.43 “Issuing Party” has the meaning set forth in Section 5.5(c).

1.44 “Know-How” means all inventions, discoveries, commercial, technical, scientific and other know-how and information, trade secrets, knowledge, technology, methods, processes, practices, formulae, instructions, skills, techniques, procedures, experiences, ideas, designs, drawings, assembly procedures, computer programs, assays and biological methodology, specifications, data and results (including biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, laboratory, preclinical, clinical, safety, Manufacturing and quality control data and know-how, including regulatory data, study designs, protocols, laboratory notes and notebooks) in written, electronic or any other tangible form now known or hereafter developed, in all cases, whether or not confidential, proprietary, patented or patentable.

1.45 “Law” or “Laws” means all laws, statutes, rules, regulations, orders, judgments, or ordinances having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision.

1.46 “Losses” has the meaning set forth in Section 6.6(a).

1.47 “Manufacture” or Manufacturing” means all activities related to the production, manufacture, processing, filling, finishing, packaging, labeling, shipping and holding of product or any intermediate thereof, including process development, process qualification and validation, scale-up, commercial manufacture and analytic development, product characterization, stability testing, quality assurance and quality control. “Manufacturing” refers to both pre-clinical and clinical Manufacturing for Development, and Manufacturing for Commercialization.

1.48 “Material Adverse Effect” means a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property, prospects or results of operations of Caribou or any of its subsidiaries, taken as a whole.

1.49 “Materials” means any tangible chemical or biological material [***], along with any tangible chemical or biological material embodying any Know-How.

1.50 “Modulate” or “Modulation” means, with respect to a Molecular Target, modulation or modification of the expression of a product of such Molecular Target [***].

1.51 “Molecular Target” means [***].

1.52 “New In-License” means any agreement entered into by a Party or any of its Affiliates and one or more Third Parties [***].

1.53 “NDA” means a New Drug Application or Supplemental New Drug Application filed with the FDA (including amendments and supplements thereto).

1.54 “Paragraph IV Certification” has the meaning set forth in Section 4.1(f)(iii).

1.55 “Patent” means (a) a patent or a patent application, (b) any additions, divisions, continuations, and continuations-in-part of any of the foregoing, and (c) all patents issuing on any of the foregoing patent applications, together with all invention certificates, substitutions, reissues, reexaminations, registrations, supplementary protection certificates, confirmations, renewals and extensions of any of (a), (b) or (c), and foreign counterparts of any of the foregoing.

1.56 “Patent Costs” means the reasonable, documented, out-of-pocket costs and expenses paid to outside legal counsel, and filing and maintenance expenses, actually and reasonably incurred by a Party in the Prosecution of Patents.

1.57 “Peptide” means any single amino acid or polypeptide [***].

1.58 “Person” means any individual, partnership, joint venture, limited liability company, corporation, firm, trust, association, unincorporated organization, governmental authority or agency, or any other entity not specifically listed herein.

1.59 “Product” means any product [***] for use in the Intellia Field.

1.60 “Product Candidate” means [***] for use in the Intellia Field.

1.61 “Prosecute” or “Prosecution” means in relation to any Patents, (a) to prepare and file patent applications, including re-examinations or re-issues thereof, and represent applicants or assignees before relevant patent offices or other relevant Governmental Authorities during examination, re-examination and re-issue thereof, in appeal processes and interferences, or any equivalent proceedings [***], (b) to defend all such applications against Third Party oppositions or other challenges, (c) to secure the grant of any patents arising from such patent application, (d) to maintain in force any issued patent (including through payment of any relevant maintenance fees), (e) to obtain and maintain patent term extensions or supplemental protection certificates or their equivalents, and (f) to make all decisions with regard to any of the foregoing activities.

1.62 “Receiving Party” has the meaning set forth in Section 5.1.

1.63 “Regulatory Approval” means, with respect to a country or extra-national territory, any and all approvals (including NDAs and BLAs), licenses, registrations or authorizations of any Regulatory Authority necessary in order to commercially distribute, sell or market a product in such country or some or all of such extra-national territory, but not including any pricing or reimbursement approvals.

1.64 “Regulatory Authority” means any national (*e.g.*, the FDA), supra-national (*e.g.*, the EMA), regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, in any jurisdiction in the world, involved in the granting of Regulatory Approval.

1.65 "Regulatory Filings" means any submission to a Regulatory Authority of any appropriate regulatory application together with any related correspondence and documentation, and will include any submission to a regulatory advisory board, marketing authorization application, and any supplement or amendment thereto.

1.66 "Related Party" means, with respect to a Party, any Person which (directly or indirectly) owns, is owned by or has common ownership with such Party, when such ownership interest is [***]% or more of the stock, shares, membership or other similar interest in or by such Person.

1.67 "Related Party Sublicense" has the meaning set forth in Section 2.3(d).

1.68 "Release" has the meaning set forth in Section 5.5(c).

1.69 "Required In-License Provisions" has the meaning set forth in Section 2.7(d).

1.70 "Research License" has the meaning set forth in Section 2.1.

1.71 "Reviewing Party" has the meaning set forth in Section 5.5(c).

1.72 "SEC" has the meaning set forth in Section 5.5(b).

1.73 "Spinout Transaction" has the meaning set forth in the Recitals of this Agreement.

1.74 "Sublicensee" means any Person that is granted a sublicense as permitted by Section 2.3 either (a) directly by a Party or (b) indirectly by any Person granted rights by a Party pursuant to sub-clause (a).

1.75 "Therapeutic License" has the meaning set forth in Section 2.1.

1.76 "Term" has the meaning set forth in Section 7.1.

1.77 "Territory" means [***].

1.78 "Third Party" means any Person other than Caribou, Intellia and their respective Affiliates.

1.79 "Third Party Claims" has the meaning set forth in Section 6.6(a).

1.80 [***].

1.81 "Third Party Licenses" means the Caribou In-Licenses and the Intellia Included In-Licenses. A Party's Third Party Licenses are, for Caribou, the Caribou In-Licenses and, for Intellia, the Intellia Included In-License.

1.82 "United States" or "U.S." means the United States of America, including its territories and possessions, the District of Columbia and Puerto Rico.

2. License Grants and Obligations.

2.1 Caribou License Grant. Subject to the terms and conditions of this Agreement, Caribou hereby grants to Intellia (i) an exclusive (even as to Caribou), worldwide license, with the right to grant sublicenses [***] solely as described in Section 2.3, under the Caribou IP to Exploit Products in the Intellia Field in the Territory ("Therapeutic License") and (ii) a non-exclusive, worldwide license, with the right to grant sublicenses [***] solely as described in Section 2.3, under the Caribou IP to conduct research and Development on Product Candidates and Products [***] ("Research License"). [***]

2.2 Intellia License Grant. Subject to the terms and conditions of this Agreement, Intellia hereby grants to Caribou an exclusive (even as to Intellia), worldwide license, with the right to grant sublicenses [***] solely as described in Section 2.3, under the Intellia IP to Exploit [***] products and/or services in the Caribou Field.

2.3 Sublicensing Rights.

(a) The license(s) granted to Intellia in Section 2.1 and to Caribou in Section 2.2 may be sublicensed, in full or in part, by Intellia and Caribou, respectively, (each, the "Sublicensing Party") by a written agreement to its Affiliates and Third Parties (with the further right to sublicense [***] provided that the following shall likewise apply with respect to sublicenses granted by a Sublicensee), provided, that:

(i) the Sublicensing Party will provide to the other Party a copy of any sublicense agreement with a Sublicensee within [***] days of execution thereof, which sublicense agreement may be redacted as necessary to protect commercially sensitive information to the extent such information is not reasonably necessary to determine compliance with this Agreement or to determine the rights granted under any of the Caribou IP or Intellia IP, as applicable (together with an accurate English translation of such sublicense, if applicable) provided that if such agreement is with a Related Party the Sublicensing Party shall provide an unredacted copy thereof;

(ii) the Sublicensing Party will be responsible for any and all obligations of such Sublicensee as if such Sublicensee were "Intellia" or "Caribou", as applicable, hereunder;

(iii) any such Sublicensee will agree in writing to be bound by identical obligations as the Sublicensing Party hereunder with respect to the activities of such Sublicensee hereunder;

(iv) to the extent that the Sublicensing Party or any Sublicensee grants a sublicense under any intellectual property subject to a Caribou In-License or Intellia Included In-License, as applicable, such sublicense (and such further sublicensee) will be subject to the terms of such Caribou In-License or Intellia Included In-License, including such sublicensee's compliance with the Required In-License Provisions [***].

2.4 No Implied Rights. No license, sublicense or other right is or will be created or granted hereunder by implication, estoppel or otherwise. Any licenses, sublicenses or rights will be granted only as expressly provided in this License Agreement and each Party retains all other rights under its intellectual property. Intellia agrees that neither it, nor any of its Affiliates or sublicensees, will use or otherwise exploit the Caribou IP, except as expressly licensed and permitted in this Agreement. Caribou agrees that neither it, nor any of its Affiliates or sublicensees, will use or otherwise exploit the Intellia IP, except as expressly licensed and permitted in this Agreement.

2.5 Parties' Activities. As of and after the Effective Date, as between the Parties, except as expressly provided herein or otherwise agreed in writing by the Parties, each Party will be solely responsible for, and will bear all of the costs and expenses of, all its activities within its respective field (i.e., the Caribou Field with respect to Caribou and the Intellia Field with respect to Intellia), including all Development, Manufacturing and Commercialization activities.

2.6 Technical Assistance.

(a) From time to time during the Term, Caribou will reasonably cooperate with Intellia to transfer to Intellia a copy of any Know-How licensed to Intellia under Section 2.1 that has not been previously transferred to Intellia.

(b) From time to time during the Term, Intellia will reasonably cooperate with Caribou to transfer to Caribou a copy of any Know-How licensed to Caribou under Section 2.2 that has not been previously transferred to Caribou.

2.7 Third-Party Licenses.

(a) New In-Licenses. Each Party may independently negotiate one or more New In-Licenses. In which case, the Party that enters into such New In-License ("In-Licensing Party") will notify in writing the other Party ("In-License Sublicensee Party") of such agreement. In the event such notice is given, such In-License Sublicensee Party may elect at any time within [***] days after receipt of such notice to take the benefit of such New In-License ("In-License Opt-In Period") by sending written notice of such election ("In-License Election Notice") to such In-Licensing Party and, in such case the Parties shall enter into an addendum ("Included In-License Addendum") setting forth the material terms and conditions with which the In-License Sublicensee Party and its Affiliates and

any Sublicensee thereunder must comply with or are applicable with respect to such New In-License. From the date of execution by each Party of such Included In-License Addendum and subject to Section 2.7(b)(ii) and compliance with the terms of such Included In-License Addendum, [***] such New In-License will be either (A) in the case of a Caribou New In-License that Intellia so elects to take, a "Caribou Included In-License," or (B) in the case of an Intellia New In-License that Caribou so elects to take, an "Intellia Included In-License." Either Party may instead elect not to take the benefit of a New In-License either by not responding to the In-Licensing Party's original notice within such In-License Opt-In Period or by expressly notifying the In-Licensing Party of such rejection by return written notice at any time during such In-License Opt-In Period [***].

(b) Payments for Third Party Licenses.

(i) Caribou Pre-Existing In-Licenses. With respect to any Caribou Pre-Existing In-License, Caribou will be responsible for all payments required to be paid to the licensor under such Caribou Pre-Existing In-License [***].

(ii) Caribou Included In-Licenses and Intellia Included In-Licenses. With respect to each Caribou Included In-License and Caribou as In-Licensing Party thereunder and each Intellia Included In-License and Intellia as In-Licensing Party thereunder, the In-Licensing Party will be responsible for all payments required to be paid to the licensor under such Caribou Included In-License or Intellia Included In-License, as applicable [***].

(iii) At any time during the Term, (A) Intellia may request of Caribou the status of any payments owed by Caribou to any licensor under any of the Caribou In-Licenses, and (B) Caribou may request of Intellia the status of any payments owed by Intellia to any licensor under any of the Intellia Included In-Licenses.

(c) Maintenance of Third Party Licenses; Stand-By License.

(i) Caribou.

(A) Subject to Intellia paying all amounts due hereunder and complying with the Required In-License Provisions with respect to Caribou In-Licenses, Caribou (1) will duly perform and observe all of its obligations under each of the Caribou In-Licenses in all material respects and maintain in full force and effect each of the Caribou In-Licenses, including payment of royalties and other amounts to the counterparty of any such Caribou In-License, and (2) will not, without Intellia's prior written consent (such consent not to be unreasonably withheld, conditioned or delayed), (x) amend, modify, restate, cancel, supplement or waive any provision of any Caribou In-License, or grant any consent thereunder, or agree to do any of the foregoing, in each case in a manner that would materially adversely affect Intellia's rights hereunder, and in any event without giving Intellia at least [***] prior written notice of any amendment, modification, restatement, cancellation, supplement or waiver of any provision of any of the Caribou In-Licenses in each case in a manner that would materially adversely affect Intellia's rights hereunder, or (y) exercise any right to terminate any of the Caribou In-Licenses in a manner that would materially adversely affect Intellia's rights hereunder. Caribou will provide Intellia with written notice as promptly as practicable (and in any event within [***]) after becoming aware of any of the following: (I) any material breach or default by Caribou or any of its Affiliates of any covenant, agreement or other provision of a Caribou In-License, (II) any notice or claim from the counterparty to a Caribou In-License terminating or providing notice of termination of such Caribou In-License, or (III) any notice or claim alleging any breach of default under any Caribou In-License. [***]. Caribou's obligations under this Section 2.7(c)(i)(A) shall continue on a Caribou In-License-by-Caribou In-License basis for the term of such Caribou In-License.

[***]

(ii) Intellia.

(A) Subject to Caribou paying all amounts due hereunder and complying with the Required In-License Provisions with respect to Intellia's Included In-Licenses, Intellia (1) will duly perform and observe all of its obligations under each of the Intellia Included In-Licenses in all material respects and maintain in full force and effect each of the Intellia Included In-Licenses, including payment of royalties and other amounts to the counterparty of any such Intellia Included In-License, and (2) will not, without Caribou's prior written consent (such consent not to be

unreasonably withheld, conditioned or delayed), (x) amend, modify, restate, cancel, supplement or waive any provision of any Intellia Included In-License, or grant any consent thereunder, or agree to do any of the foregoing, in each case in a manner that would materially adversely affect Caribou's rights hereunder, and in any event without giving Caribou at least [***] prior written notice of any amendment, modification, restatement, cancellation, supplement or waiver of any provision of any of the Intellia Included In-Licenses in each case in a manner that would materially adversely affect Caribou's rights hereunder, or (y) exercise any right to terminate any of the Intellia Included In-Licenses in a manner that would materially adversely affect Caribou's rights hereunder. Intellia will provide Caribou with written notice as promptly as practicable (and in any event within [***]) after becoming aware of any of the following: (I) any material breach or default by Intellia or any of its Affiliates of any covenant, agreement or other provision of an Intellia Included In-License, (II) any notice or claim from the counterparty to an Intellia Included In-License terminating or providing notice of termination of such Intellia Included In-License, or (III) any notice or claim alleging any breach of default under any Intellia Included In-License. [***]. Intellia's obligations under this Section 2.7(c)(ii)(A) shall continue on an Intellia Included In-License-by-Intellia Included In-License basis for the term of such Intellia Included In-License.

[***]

(d) Compliance with Third Party Licenses. It is understood that the Third Party Licenses may require that Sublicensees comply with certain terms of such Third Party Licenses or that certain terms and conditions are applicable with respect to such Third Party Licenses ("Required In-License Provisions"). Each Party shall comply, and shall cause its Sublicensees to comply, with the Required In-License Provisions of the other Party's Third Party Licenses as a sublicensee thereunder and such Required In-License Provisions are deemed incorporated by reference into this Agreement. Without limiting the generality of the foregoing, the Required In-License Provisions of each Third Party License existing as of the Effective Date are those set forth in an addendum on Exhibit D (each such addendum and each Included In-License Addendum, an "In-License Addendum"). Without limiting the foregoing, the applicable terms and conditions herein (including Articles 2 and 4) applicable to the Patents and Know-How subject to a Caribou In-License or Intellia Included In-License, as applicable, are subject to and limited by the applicable terms and conditions of such Caribou In-License or Intellia Included In-License, as applicable, including as set forth on the corresponding In-License Addendum.

2.8 [***].

2.9 Section 365(n) of the Bankruptcy Code. All rights and licenses granted pursuant to any Section of this Agreement are, and will be deemed to be, rights and licenses to "intellectual property" (as defined in Section 101(35A) of title 11 of the United States Code and of any similar provisions of applicable Laws under any other jurisdiction (the "Bankruptcy Code")). Each Party agrees that the other Party, as a licensee of rights and licenses under this Agreement, will retain and may fully exercise all of its rights and elections under the Bankruptcy Code. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party under the Bankruptcy Code or analogous provisions of applicable Laws outside the United States, the other Party will be entitled to a complete duplicate of (or complete access to, as appropriate) any intellectual property licensed to such Party and all embodiments of such intellectual property, which, if not already in such Party's possession, will be promptly delivered to it (a) upon any such commencement of a bankruptcy proceeding upon such Party's written request therefor, unless the Party in the bankruptcy proceeding elects to continue to perform all of its obligations under this License Agreement or (b) if not delivered under clause (a), following the rejection of this License Agreement in the bankruptcy proceeding, upon written request therefor by the other Party. The Parties further agree that, upon the occurrence of a Bankruptcy Event with respect to a Party, each Party shall have the right to retain and enforce their rights under this Agreement, subject to Section 7.5.

3. Diligence.

Intellia shall use commercially reasonable and diligent efforts to research, Develop, Manufacture and Commercialize at least [***] Product in the Territory. Intellia shall keep Caribou reasonably informed as to its (and its Affiliates' and Sublicensees') Development, Manufacture and Commercialization activities related to Product in the Territory, but no more frequently than [***].

4. Patent Prosecution, Infringement and Extensions.

4.1 Prosecution and Maintenance.

(a) Each Party shall control the Prosecution of its Cross-Licensed Patents. Each Party shall: (i) keep the other Party reasonably informed regarding its activities with respect to the Prosecution of its Cross-Licensed Patents, including by providing to the other Party for its review copies of draft applications of such Patents and substantive responses and other correspondence between patent offices and such Party pertaining to such Patents reasonably in advance of the deadline for filing; (ii) provide the other Party an opportunity to timely comment on such draft applications, responses and other correspondence pertaining to such Patents; and (iii) consider in good faith any reasonable comments thereon timely provided to such Party, provided that such Party shall implement the other Party's timely comments regarding claims of such Patents directed to the other Party's respective field [***].

(b) Intellia will be responsible for thirty percent (30%) of the Patent Costs incurred and paid by Caribou in connection with Prosecution activities relating to the Caribou Patents [***]. Caribou will be responsible for thirty percent (30%) of the Patent Costs incurred and paid by Intellia in connection with Prosecution activities relating to the Intellia Patents [***].

(c) [***]

(d) Either Party may at any time send a written notice to the other identifying any Patent within the Caribou Patents or the Intellia Patents, as applicable, that such Party no longer wishes to be kept informed and provide comments with respect to the Prosecution thereof pursuant to Section 4.1(a), and, in such case and from the date of such notice such Party's payment obligation of any Patent Costs incurred in connection with Prosecution activities relating to such Patent pursuant to Section 4.1(b) shall cease and the other Party's obligations under Section 4.1(a) with respect to such Patent shall terminate.

(e) Solely by a Party. If either Party determines to abandon any Patent, within [***] such Party shall provide the other Party with written notice of such decision at least [***] days prior to the date on which such abandonment would become effective. In such event, the other Party, at its sole expense, may assume control of the Prosecution of any such Patent [***].

(f) Patent Extensions; Orange Book Listings; Patent Certifications.

(i) Patent Term Extension. Each Party will have the sole right to obtain patent term extensions or supplemental protection certificates or their equivalents in any country ("Extensions") for its Cross-Licensed Patents [***].

(ii) Data Exclusivity and Orange Book Listings. With respect to data exclusivity periods (such as those periods listed in the Orange Book (including any available pediatric extensions), periods provided for under 42 U.S.C. §262 (including any available pediatric extensions), or periods under national implementations of Article 10.1(a)(iii) of Directive 2001/EC/83 (including pediatric extensions and supplementary protection certificates) , and all equivalents in any country), [***] will seek and maintain all such data exclusivity periods that may be available for any Products. [***] will determine which Caribou Patents or Intellia Patents, if any, will be listed in the Orange Book, listed pursuant to Section 262(l) of the Biologics Price Competition and Innovation Act of 2010 ("Biosimilar Act"), or included in any similar patent listing in any country with respect to Products. [***].

(iii) Notification of Patent Certification. Each Party will [***] notify, and provide the other Party with copies of any allegations of alleged patent invalidity, unenforceability or non-infringement of a Caribou Patent or Intellia Patent, as the case may be, pursuant to a Paragraph IV Patent Certification by a Third Party filing an Abbreviated New Drug Application or an application under §505(b)(2) of the United States Federal Food, Drug, and Cosmetic Act (as amended or any replacement thereof), in relation to an application under Section 262(k) of the Biosimilar Act, or any other similar patent certification by a Third Party, and any foreign equivalent thereof ("Paragraph IV Certification"). Such notification and copies will be provided to such other Party within [***] days after Caribou or Intellia, as applicable, receives such certification, and will be sent to the address set forth in Section 8.13.

(g) Cooperation. Each Party will reasonably cooperate with the other Party in the Prosecution of the Caribou Patents and the Intellia Patents. Such cooperation includes promptly executing all documents, or requiring inventors,

subcontractors, employees and consultants and agents of such Party and its Affiliates and its Sublicensees, to execute all documents, as reasonable and appropriate so as to enable the Prosecution of any such Caribou Patents or Intellia Patents, as applicable, in any country.

(h) Third Party Rights.

(i) To the extent that a Third Party licensor of Caribou has retained any right to Prosecute any Caribou Patent licensed to Caribou pursuant to a Caribou In-License or to otherwise be involved in such activities, Caribou will use commercially reasonable efforts to cause such Third Party licensor to take the actions specified by this Section 4.1, but Caribou will not be deemed to be in breach of its obligations under this Section 4.1 if, after using such commercially reasonable efforts, it is unable to comply with such obligations because of actions taken or not taken by such Third Party licensor.

(ii) To the extent that a Third Party licensor of Intellia has retained any right to Prosecute any Intellia Patent licensed to Intellia pursuant to an Intellia Included In-License or to otherwise be involved in such activities, Intellia will use commercially reasonable efforts to cause such Third Party licensor to take the actions specified by this Section 4.1, but Intellia will not be deemed to be in breach of its obligations under this Section 4.1 if, after using such commercially reasonable efforts, it is unable to comply with such obligations because of actions taken or not taken by such Third Party licensor.

4.2 Enforcement.

(a) Notice. Each of Caribou and Intellia (i) will [***] notify, in writing, the other Party upon learning of (A) any infringement or threatened infringement by a Third Party of the Caribou Patents or the Intellia Patents [***], or (B) any infringement or threatened infringement by a Third Party of the Caribou Patents or the Intellia Patents [***], and (ii) will, along with such notice, supply such other Party with any evidence in its possession pertaining thereto.

(b) Generally.

(i) For any judicial or arbitration action initiated or related to a Paragraph IV Certification or a patent listed in the Orange Book for a Product, Intellia shall, as between the Parties, have the sole right, but not the obligation, using counsel of its choosing and at its sole cost and expense, to institute enforcement actions (or take other appropriate legal action) and defend against declaratory judgments.

(ii) Except as otherwise expressly provided in this Section 4.2 [***] as between the Parties, (x) Caribou shall have the sole right, but not the obligation, using counsel of its choosing and at its sole cost and expense, to institute enforcement actions (or take other appropriate legal action) and defend against declaratory judgments with respect to Patents in the Caribou Patents and (y) Intellia shall have the sole right, but not the obligation, using counsel of its choosing and at its sole cost and expense, to institute enforcement actions (or take other appropriate legal action) and defend against declaratory judgments with respect to Patents in the Intellia Patents.

(c) Intellia Competitive Infringement. In the event Caribou does not institute enforcement action under a Patent within the Caribou Patents against Intellia Competitive Infringement (or has not otherwise abated such infringement) within [***] days after a written request by Intellia to do so, Intellia will have the right, but not the obligation, using counsel of its choosing and at its sole cost and expense, to take action to enforce such Patent against such Third Party for such Intellia Competitive Infringement [***]. Intellia will keep Caribou reasonably informed of all developments in the prosecution or settlement of such suit or action, including by providing copies of all documents received or filed in connection with any such suit or action, which information and documents will be subject to Section 5.

(d) Caribou Competitive Infringement. In the event Intellia does not institute enforcement action under a Patent within the Intellia Patents against Caribou Competitive Infringement (or has not otherwise abated such infringement) within [***] days after a written request by Caribou to do so, Caribou will have the right, but not the obligation, using counsel of its choosing and at its sole cost and expense, to take action to enforce such Patent against such Third Party for such Caribou Competitive Infringement [***]. Caribou will keep Intellia reasonably

informed of all developments in the prosecution or settlement of such suit or action, including by providing copies of all documents received or filed in connection with any such suit or action, which information and documents will be subject to Section 5.

(e) Cooperation. With respect to any suit or action brought by Intellia pursuant to Section 4.2(b) and Section 4.2(c), Caribou will cooperate, and, with respect to any suit or action brought by Caribou pursuant to Section 4.2(b) and 4.2(d), Intellia will cooperate, with such enforcing Party (as may be reasonably requested by such enforcing Party and at such enforcing Party's expense), including by (i) providing access to relevant documents and other evidence, (ii) making its and its Affiliates and licensees and Sublicensees and all of their respective employees, subcontractors, consultants and agents (to the extent such non-enforcing Party is able with respect to licensees and Sublicensees) available at reasonable business hours and for reasonable periods of time, but only to the extent relevant to such suit or action, and (iii) if necessary, by being joined as a party, subject to, for this clause (iii), the enforcing Party agreeing to indemnify such non-enforcing Party for its involvement as a named party in such suit or action and paying those Patent Costs incurred by such Party in connection with such joinder.

(f) Settlement; Damages. Neither Intellia, with respect to any suit or action brought by Intellia pursuant to Section 4.2(c), nor Caribou, with respect to any suit or action brought by Caribou pursuant to Section 4.2(d), will settle or consent to an adverse judgment, or make any admissions or assert any position in a manner that would adversely affect the rights or interests of the other Party (including by making any admission or assertion of any position that would adversely affect the scope, validity or enforceability of any Patents within the Caribou Patents or Intellia Patents, as applicable) in any such suit or action without the prior written consent of the other Party (such consent not to be unreasonably withheld, conditioned or delayed). [***]. Intellia, with respect to any suit or action brought by Intellia [***], and Caribou, with respect to any suit or action brought by Caribou [***], will have the right to retain in full any damages or other sums recovered in such suit or action or in the settlement thereof after reimbursement of each Parties' costs and expenses (including attorneys' and professional fees) incurred in connection with such action (and not previously reimbursed).

(g) Third Party Rights.

(i) To the extent that a Third Party licensor of Caribou has retained with respect to any Patent within the Caribou Patents licensed to Caribou pursuant to a Caribou In-License any right to abate any Intellia Competitive Infringement of such Patent or take any other actions described in Section 4.2(c) for such Patent or to otherwise be involved in such activities, Caribou will use commercially reasonable efforts to cause such Third Party licensor to take the actions specified by Sections 4.2(c), (e) and (f) in a manner consistent with such Caribou In-License [***].

(ii) To the extent that a Third Party licensor of Intellia has retained with respect to any Patent within the Intellia Patents licensed to Intellia pursuant to an Intellia Included In-License any right to abate any Caribou Competitive Infringement of such Patent or take any other actions described in Section 4.2(d) for such Patent or to otherwise be involved in such activities, Intellia will use commercially reasonable efforts to cause such Third Party licensor to take the actions specified by Sections 4.2(d), (e) and (f) in a manner consistent with such Intellia Included In-License [***].

4.3 Patent Challenges.

(a) Each Party will [***] notify the other in the event that any Third Party [***] (any such Third Party action, a "Patent Challenge").

(b) [***]. Upon the controlling Party's request and at controlling Party's reasonable expense, the other Party agrees to join in any such effort and, in any event, to cooperate with the controlling Party. The non-controlling Party will have the right, at its own cost and expense and by counsel of its choice, to be represented in any such effort, subject to the controlling Party's right to control such effort. If an initially controlling Party does not take steps to defend a Patent Challenge within a commercially reasonable time, or elects not to continue any such defense, then such Party shall timely advise the other Party in writing (in any event no less than [***] days prior to the date on which the initial mandatory notice is due under 37 C.F.R. §42.8, as applicable or equivalent thereof) and the other Party will have the right, but not the obligation, to bring and control any effort in defense of such Patent Challenge at its sole cost and expense.

5. Confidentiality.

5.1 Confidential Information. Each Party ("Disclosing Party") may have disclosed or will disclose to the other Party ("Receiving Party"), and Receiving Party may acquire during the course and conduct of activities under this Agreement, certain proprietary or confidential information of Disclosing Party. The term "Confidential Information" means (a) all Materials and (b) all ideas and information of any kind, whether in written, oral, graphical, machine-readable or other form, whether or not marked as confidential or proprietary, which are transferred, disclosed or made available to Receiving Party by Disclosing Party or at the request of Receiving Party, including any of the foregoing of Third Parties.

5.2 Restrictions. Receiving Party will, and will cause its Affiliates and their respective officers, directors, employees and agents to, keep all Disclosing Party's Confidential Information (including any Confidential Information that constitutes a trade secret) in confidence with the same degree of care with which Receiving Party holds its own confidential information (though no less than reasonable care). Except as expressly provided herein, Receiving Party will not use or disclose, and will cause its Affiliates and their respective officers, directors, employees and agents not to use or disclose, during the Term and for a period of [***] years thereafter, Disclosing Party's Confidential Information, except as provided in Section 5.4.

5.3 Exceptions. Receiving Party's obligation of nondisclosure and the limitations upon the right to use the Disclosing Party's Confidential Information set forth in Section 5.2 will not apply to the extent that Receiving Party can demonstrate that the Disclosing Party's Confidential Information: (a) was known to Receiving Party or any of its Affiliates prior to the time of disclosure other than under an obligation of confidentiality; (b) is or becomes public knowledge through no fault or omission of Receiving Party or any of its Affiliates; (c) is obtained by Receiving Party or any of its Affiliates without an accompanying obligation of confidentiality from a Third Party under no obligation of confidentiality to Disclosing Party; or (d) has been independently developed by employees, subcontractors, consultants or agents of Receiving Party or any of its Affiliates without the aid, application or use of Disclosing Party's Confidential Information, as evidenced by contemporaneous written records.

5.4 Permitted Use and Disclosures. Receiving Party may use and disclose Disclosing Party's Confidential Information to the extent (and only to the extent) such disclosure is reasonably necessary in the following instances:

(a) in order to comply with applicable Law or with a legal or administrative proceeding (including responding to a valid order of a court of competent jurisdiction or other competent authority);

(b) in connection with prosecuting or defending litigation or for Prosecuting Patents;

(c) in connection with obtaining Regulatory Approval of a Product to the extent such disclosure is made to a Regulatory Authority; and

(d) to its Affiliates and potential and actual contractors, Sublicensees and collaborators, potential and actual acquirers or assignees, potential and actual bankers, investors and lenders, and attorneys, accountants and other advisors in order to perform its obligations or to exercise any license or other rights under this Agreement.

In the case of a disclosure pursuant to (i) Sections 5.4(a) or 5.4(b), where reasonably possible, Receiving Party will notify Disclosing Party of Receiving Party's intent to make any disclosure pursuant thereto sufficiently prior to making such disclosure so as to allow Disclosing Party adequate time to take whatever action it may deem appropriate to protect the confidentiality of the information to be disclosed, and (ii) with respect to Sections 5.4(c) or 5.4(d), each of those named people and entities are required to comply with restrictions on use and disclosure at least as restrictive as those in Section 5.2 (other than potential and actual acquirers, assignees, bankers, investors and lenders, which must be bound prior to disclosure by commercially reasonable obligations of confidentiality). Notwithstanding the foregoing, Receiving Party assumes responsibility for those Persons maintaining Disclosing Party's Confidential Information in confidence and using the same only for the purposes described herein.

5.5 Terms of this Agreement; Publicity.

(a) Restrictions. The Parties agree that the terms of this Agreement will be treated as Confidential Information of both Parties and may be disclosed only as permitted by Sections 5.4, 5.5(b) and 5.5(c).

(b) Securities Filings. Each Party acknowledges and agrees that the other Party may submit this Agreement (including for clarity, the Exhibits attached hereto) to the United States Securities and Exchange Commission (the "SEC") or any other securities exchange and if a Party does submit this Agreement to the SEC or any other securities exchange, such Party agrees to consult with the other Party with respect to the preparation and submission of a confidential treatment request for this Agreement. If a Party is required by Law to make a disclosure of the terms of this Agreement in a filing with or other submission to the SEC or any other securities exchange, and (i) such Party has provided copies of the disclosure to the other Party as far in advance of such filing or other disclosure as is reasonably practicable under the circumstances, (ii) such Party has promptly notified the other Party in writing of such requirement and any respective timing constraints, and (iii) such Party has given the other Party a reasonable time under the circumstances from the date of notice by such Party of the required disclosure to comment upon, request confidential treatment or approve such disclosure, then such Party will have the right to make such public disclosure at the time and in the manner reasonably determined by its counsel to be required by Law. Notwithstanding anything to the contrary herein, it is hereby understood and agreed that if a Party is seeking to make a disclosure as set forth in this Section 5.5(b), and the other Party provides comments within the respective time periods or constraints specified herein or within the respective notice, the Party seeking to make such disclosure or its counsel, as the case may be, will in good faith (A) consider incorporating such comments and (B) use reasonable efforts to incorporate such comments, limit disclosure or obtain confidential treatment to the extent reasonably requested by the other Party.

(c) Press Releases. The Parties agree to issue a mutually agreed joint press release (the "Initial Press Release") at a mutually agreed time following the closing of the Spinout Transaction. Except as required by applicable Law, neither Party may issue any additional press release or make any other public announcement or statement concerning this Agreement, the transactions contemplated hereby or the terms hereof, without the prior written consent of the other Party (such consent not to be unreasonably withheld, conditioned or delayed). In the event either Party (the "Issuing Party") desires to issue a press release or other public statement disclosing information relating to this Agreement, the transactions contemplated hereby or the terms hereof, the Issuing Party will provide the other Party (the "Reviewing Party") with a copy of the proposed press release or public statement (the "Release") and seek the Reviewing Party's prior written consent; provided, that to the extent the press release or a public statement is to be made under the circumstances described in Section 5.4(a), the Reviewing Party may not withhold, condition or delay its consent. The Issuing Party will specify with each such Release, taking into account the urgency of the matter being disclosed, a reasonable period of time within which the Receiving Party may provide any comments on such Release and if the Receiving Party fails to provide any comments during the response period called for by the Issuing Party, the Reviewing Party will be deemed to have consented to the issuance of such Release. If the Receiving Party provides any comments, the Parties will consult on such Release and work in good faith to prepare a mutually acceptable Release. Either Party may subsequently publicly disclose any information previously contained in either the Initial Press Release or any such Release so consented to.

6. Warranties; Limitations of Liability; Indemnification.

6.1 Mutual Representations and Warranties. Each Party represents and warrants to the other as of the Effective Date that it has the legal right and power to enter into this Agreement, to extend the rights and licenses granted or to be granted to the other in this Agreement, and to fully perform its obligations hereunder.

[***]

(b) Attached hereto as Exhibit B is a complete and accurate list of all patent applications and patents owned by Caribou as of the Effective Date and attached hereto as Exhibit B is, to Caribou's knowledge, a complete and accurate list of all patent applications and patents exclusively in-licensed by Caribou as of the Effective Date.

[***].

6.3 Disclaimers. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, THE PARTIES MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTY OF ANY KIND, EITHER EXPRESS OR

IMPLIED, WITH RESPECT TO ANY PATENTS, KNOW-HOW, MATERIALS, PRODUCT CANDIDATES OR PRODUCTS, INCLUDING WARRANTIES OF VALIDITY OR ENFORCEABILITY OF ANY CARIBOU PATENTS OR Intellia PATENTS, TITLE, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR USE OR PURPOSE, PERFORMANCE, AND NONINFRINGEMENT OF ANY THIRD PARTY PATENTS OR OTHER INTELLECTUAL PROPERTY RIGHTS.

[***].

6.6 Indemnification.

(a) Indemnification by Intellia. Intellia will indemnify Caribou, its Affiliates and their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, "Caribou Indemnitees"), and defend and save each of them harmless, from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) (collectively, "Losses") in connection with any and all suits, proceedings, causes of action, claims or demands of any Third Party (collectively, "Third Party Claims") arising from or occurring as a result of: (i) the breach by Intellia of any term of this Agreement; (ii) any gross negligence or willful misconduct on the part of Intellia; or (iii) the Development, Manufacture or Commercialization by or under the authority of Intellia or any of its Affiliates or Sublicensees of Product Candidates or Products in the Intellia Field or other exercise of the licenses or other rights granted hereunder by or under the authority of Intellia, except in each case for those Losses attributable to a cause or event for which Caribou has an obligation to indemnify Intellia pursuant to Section 6.6(b), as to which Losses each Party will indemnify the other to the extent of their respective liability; provided, however, that Intellia will not be obligated to indemnify the Caribou Indemnitees for any Losses to the extent that such Losses arise as a result of gross negligence or willful misconduct on the part of a Caribou Indemnitee.

(b) Indemnification by Caribou. Caribou will indemnify Intellia, its Affiliates and their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, "Intellia Indemnitees"), and defend and save each of them harmless, from and against any and all Losses in connection with any and all Third Party Claims arising from or occurring as a result of: (i) the breach by Caribou of any term of this Agreement; (ii) any gross negligence or willful misconduct on the part of Caribou; or (iii) the Development, Manufacture or Commercialization by or under the authority of Caribou (not including by or under the authority of Intellia) or any of its Affiliates or Sublicensees of products in the Caribou Field or other exercise of the licenses or other rights granted hereunder by or under the authority of Caribou (not including by or under the authority of Intellia), except in each case for those Losses attributable to a cause or event for which Intellia has an obligation to indemnify Caribou pursuant to Section 6.6(a), as to which Losses each Party will indemnify the other to the extent of their respective liability for the Losses; provided, however, that Caribou will not be obligated to indemnify Intellia Indemnitees for any Losses to the extent that such Losses arise as a result of gross negligence or willful misconduct on the part of an Intellia Indemnitee.

(c) Indemnification Procedure. A claim to which indemnification applies under Section 6.6(a) or Section 6.6(b) will be referred to herein as a "Claim". If any Party (each, an "Indemnified Party") intends to claim indemnification under this Section 6.6, the Indemnified Party will notify the other Party (the "Indemnifying Party") in writing promptly upon becoming aware of any claim that may be a Claim (it being understood and agreed, however, that the failure by an Indemnified Party to give such notice will not relieve the Indemnifying Party of its indemnification obligation under this Agreement except and only to the extent that the Indemnifying Party is actually prejudiced as a result of such failure to give notice). The Indemnifying Party will have the right to assume and control the defense of such Claim at its own expense with counsel selected by the Indemnifying Party and reasonably acceptable to the Indemnified Party. The Indemnified Party will have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnified Party, if representation of such Indemnified Party by the counsel retained by the Indemnifying Party would be inappropriate due to actual or potential conflict of interests between such counsel and any other Party represented by such counsel in such proceedings. If the Indemnifying Party does not assume the defense of such Claim as aforesaid, the Indemnified Party may defend such Claim but will have no obligation to do so. The Indemnified Party will not settle or compromise any Claim without the prior written consent of the Indemnifying Party, and the Indemnifying Party will not settle or compromise any Claim in any manner which would have an adverse effect on the Indemnified Party's interests, without the prior written consent of the Indemnified Party, which consent, in each case, will not be unreasonably withheld, conditioned or delayed. The

Indemnified Party will reasonably cooperate with the Indemnifying Party, at the Indemnifying Party's expense, and will make available to the Indemnifying Party all pertinent information under the control of the Indemnified Party, which information will be subject to Section 5.

7. Term and Termination.

7.1 Term of the Agreement. The term of this Agreement, unless earlier terminated in accordance with this Article 7, shall be for the life of the Patents under which the licenses set forth in Sections 2.1 and 2.2 are granted ("Term").

7.2 Termination for Breach of In-Licenses. In the event Caribou breaches its obligations [***] with respect to one or more Intellia Included In-Licenses or Intellia breaches its obligations [***] with respect to one or more Caribou In-Licenses ("Breached In-License"), the non-breaching Party shall have the right to terminate this Agreement with respect to the rights and (sub)licenses granted to the breaching Party under such Breached In-License upon delivery of written notice to the breaching Party, provided that such termination will not be effective if such breach has been repaired within [***] days (or such other shorter period of time set forth in the In-License Addendum for such Breached In-License) after written notice thereof is given by the non-breaching Party; further provided that, to the extent permitted by the Breached In-License, the breaching party shall have up to an additional [***] days to cure the breach if, within [***] days of receiving the written notice required by this provision, the breaching Party in writing stipulates that it breached, sets forth its plan to cure the breach [***], and explains the need for additional time to cure the breach. [***].

[***].

7.4 Breach; Consequences of Breach. In the event a Party materially breaches this Agreement (a "Default"), and if after written notice thereof from the non-defaulting Party, the defaulting Party fails to cure such Default in full within [***] days after receipt of such notice, this Agreement shall [***].

7.5 Bankruptcy Event. In the case of a Bankruptcy Event of either Party during the Term, this Agreement shall automatically be modified effective upon the date of such Bankruptcy Event to provide that [***].

8. General Provisions.

8.1 Disputes Resolution.

(a) Generally. Disputes of any nature arising under, relating to, or in connection with this Agreement ("Disputes") will be resolved pursuant to this Section 8.1.

(b) Dispute Escalation. In the event of a Dispute between the Parties, the Parties will first attempt in good faith to resolve such dispute by negotiation and consultation between themselves. In the event that such dispute is not resolved on an informal basis within [***] days from receipt of the written notice of a Dispute, any Party may, by written notice to the other, have such dispute referred to the Executive Officers (or their designees, which designee is required to have decision-making authority on behalf of such Party), who will attempt in good faith to resolve such Dispute by negotiation and consultation for a [***] day period following receipt of such written notice.

(c) Full Arbitration. In the event the Parties have not resolved such Dispute within [***] days of receipt of the written notice referring such Dispute to the Executive Officers, either Party may at any time after such [***] day period submit such Dispute to be finally settled by arbitration administered in accordance with the rules of Judicial Administration and Arbitration Services ("JAMS") in effect at the time of submission, as modified by this Section 8.1. The arbitration will be governed by the Laws of the State of New York. The arbitration will be heard and determined by [***] arbitrators who are retired judges or attorneys with at least [***] years of relevant experience in the pharmaceutical and biotechnology industry, each of whom will be impartial and independent. Each Party will appoint one arbitrator and the third arbitrator will be selected by the two Party-appointed arbitrators, or, failing agreement within thirty (30) days following appointment of the second arbitrator, by JAMS. Such arbitration will take place in Alameda County, California. The arbitration award so given will be a final and binding determination of the Dispute, will be fully enforceable in any court of competent jurisdiction, and will not include any damages

expressly prohibited by Section 6.4. Fees, costs and expenses of arbitration will be divided by the Parties in the following manner: Intellia will pay for the arbitrator it chooses, Caribou will pay for the arbitrator it chooses, and the Parties will share payment for the third arbitrator. Except in a proceeding to enforce the results of the arbitration or as otherwise required by Law, neither Party nor any arbitrator may disclose the existence, content or results of any arbitration hereunder without the prior written consent of both Parties (each such consent not to be unreasonably withheld, conditioned or delayed).

(d) Injunctive Relief. Notwithstanding the dispute resolution procedures set forth in this Section 8.1, in the event of an actual or threatened breach of this Agreement, the aggrieved Party may seek equitable relief (including restraining orders, specific performance or other injunctive relief) in any court or other forum, without first submitting to any dispute resolution procedures hereunder.

(e) Tolling. The Parties agree that all applicable statutes of limitation and time-based defenses (such as estoppel and laches) will be tolled while the dispute resolution procedures set forth in this Section 8.1 are pending, and the Parties will cooperate in taking all actions reasonably necessary to achieve such a result. In addition, during the pendency of any Dispute under this Agreement, this Agreement, including all licenses, sublicenses, rights and obligations, will remain in full force and effect, provided that, with respect to any Dispute in connection with a notice of termination pursuant to Section 7.2 or Section 7.4, notice of such Dispute is provided within [***] days (or such other shorter period of time set forth in the In-License Addendum for such Breached In-License, if applicable) after written notice of termination or default is given by the non-breaching Party.

8.2 Cumulative Remedies and Irreparable Harm. All rights and remedies of the Parties hereunder will be cumulative and in addition to all other rights and remedies provided hereunder or available by agreement, at law or otherwise. Further, each Party acknowledges and agrees that breach of any of the terms or conditions of this Agreement would cause irreparable harm and damage to the other and that such damage may not be ascertainable in money damages and that as a result thereof the non-breaching Party would be entitled to seek from a court equitable or injunctive relief restraining any breach or future violation of the terms contained herein by the breaching Party without the necessity of proving actual damages or posting bond. Such right to equitable relief is in addition to whatever remedies either Party may be entitled to as a matter of law or equity, including money damages.

8.3 Change of Control. Upon the occurrence of a Change of Control of either Party during the Term [***].

8.4 Relationship of Parties. Nothing in this Agreement is intended or will be deemed to constitute a partnership, agency, employer-employee or joint venture relationship between the Parties. No Party will incur any debts or make any commitments for the other, except to the extent, if at all, specifically provided therein. Except under Section 6.6(a) and 6.6(b), there are no express or implied third party beneficiaries hereunder.

8.5 Compliance with Law. Each Party will perform or cause to be performed any and all of its obligations or the exercise of any and all of its rights hereunder in good scientific manner and in compliance with all applicable Law.

8.6 Governing Law. This Agreement will be governed by and construed in accordance with the Laws of the State of New York, without respect to its conflict of laws rules or principles that might otherwise refer construction or interpretation of this Agreement to the substantive Law of another jurisdiction; provided, however, that any dispute relating to the scope, validity, enforceability or infringement of any Patents will be governed by, and construed and enforced in accordance with, the substantive Laws of the jurisdiction in which such Patents apply. The Parties agree to exclude the application to this Agreement of the United Nations Convention on Contracts for the International Sale of Goods.

8.7 Counterparts; Facsimiles. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, and all of which together will be deemed to be one and the same instrument. Facsimile or PDF execution and delivery of this Agreement by either Party will constitute a legal, valid and binding execution and delivery of this Agreement by such Party.

8.8 Headings. All headings in this Agreement are for convenience only and will not affect the meaning of any provision hereof.

8.9 Waiver of Rule of Construction. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, the rule of construction that any ambiguity in this Agreement will be construed against the drafting party will not apply.

8.10 Interpretation. Whenever any provision of this Agreement uses the term "including" (or "includes"), such term will be deemed to mean "including without limitation" (or "includes without limitations"). "Herein," "hereby," "hereunder," "hereof" and other equivalent words refer to this Agreement as an entirety and not solely to the particular portion of this Agreement in which any such word is used. Except where the context otherwise requires, whenever used, the singular will include the plural, the plural the singular, the use of any gender will be applicable to all genders and the word "or" is used in the inclusive sense "and/or." Unless otherwise provided, all references to Sections, Exhibits and Schedules in this Agreement are to Sections, Exhibits and Schedules of this Agreement. References to any Sections include Sections and subsections that are part of the related Section (*e.g.*, a section numbered "Section 2.1" would be part of "Section 2", and references to "Section 2.1" would also refer to material contained in the subsection described as "Section 2.1(a)").

8.11 Binding Effect. This Agreement will inure to the benefit of and be binding upon the Parties, their Affiliates, and their respective lawful successors and assigns.

8.12 Assignment. This Agreement may not be assigned by either Party, nor may either Party delegate its obligations or otherwise transfer any rights created by this Agreement, except as expressly permitted hereunder, without the prior written consent of the other Party, which consent will not be unreasonably withheld, conditioned or delayed with respect to assignment to such Party's Affiliate; provided that either Party may assign this Agreement to such Party's successor in connection with the merger, consolidation, sale of all or substantially all of its assets or that portion of its business pertaining to the subject matter of this Agreement [***]. The rights and obligations of the Parties under this Agreement will be binding upon and inure to the benefit of the successors and permitted assigns of the Parties, and the name of a Party appearing herein will be deemed to include the name of such Party's successors and permitted assigns to the extent necessary to carry out the intent of this Section 8.12.

8.13 Notices. Except as otherwise provided herein, all notices under this Agreement will be sent by certified mail or by overnight courier service, postage prepaid, to the following addresses of the respective Parties:

If to Intellia, to:	Intellia c/o Atlas Venture 25 First St., Suite 303 Cambridge, MA 02141 Attention: President
With a required copy to:	Goodwin Procter LLP 53 State Street Boston, MA 02109 Attention: Kingsley L. Taft, Esq. & Arthur R. McGivern
If to Caribou, to:	Caribou Biosciences, Inc. 2929 7th Street, Suite 120 Berkeley, CA 94710 Attention: President
With a required copy to:	Wilson Sonsini Goodrich & Rosati 650 Page Mill Road Palo Alto, CA 94304 Attention: Ian B. Edvalson, Esq.

or to such address as each Party may hereafter designate by notice to the other Party. A notice will be deemed to have been given on the date it is received by all required recipients for the noticed Party.

8.14 Amendment and Waiver. This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by both Parties; provided that any waiver made by one Party in favor of the other will be enforceable if undertaken in a writing signed by the Party to be charged with the waiver. Any waiver of any rights or failure to act in a specific instance will relate only to such instance and will not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

8.15 Severability. In the event that any provision of this Agreement will, for any reason, be held to be invalid or unenforceable in any respect, and if the rights or obligations of either Party under this Agreement will not be materially and adversely affected thereby, (a) such provision will be given no effect by the Parties and will not form part of this Agreement, (b) all other provisions of this Agreement will remain in full force and effect, and (c) the Parties will negotiate in good faith to modify this Agreement to preserve (to the extent possible) their original intent.

8.16 Entire Agreement. This Agreement (along with the Exhibits and Schedules) contains the entire understanding of the Parties with respect to the subject matter hereof and supersedes and replaces any and all previous arrangements and understandings, whether oral or written, between the Parties with respect to the subject matter hereof.

[*Remainder of this Page Intentionally Left Blank*]

IN WITNESS WHEREOF, the Parties have caused this License Agreement to be executed by their respective duly authorized officers as of the Effective Date.

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
(Signature)

Name: Rachel E. Haurwitz
Title: President & CEO

INTELLIA, LLC
By: Caribou Biosciences, Inc.
Its: Sole Member

By: /s/ Rachel E. Haurwitz
(Signature)

Name: Rachel E. Haurwitz
Title: President & CEO

Exhibit A

Caribou Pre-Existing In-Licenses

Exclusive Assignment Agreement by and between Wageningen Universiteit ("Wageningen") and Caribou Biosciences, Inc., dated February 13, 2014, in the form provided by Caribou to Intellia as of the Effective Date (the "Wageningen Agreement").

Exclusive License between Caribou Biosciences, Inc. and the University of Vienna and the Regents of the University of California, dated April 16, 2013, as amended on April 17, 2013, in the form provided by Caribou to Intellia as of the Effective Date (the "UC/Vienna License").

Exhibit B

Caribou Patents

Title	Application No.	Filing date	Assignee	Applicable License Agreement if not owned by Company
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
Methods and Compositions for RNA-Directed Site-Specific DNA Modification	61/652,086	May 25, 2012	UC Berkeley/UCSF/ U Vienna/ E. Charpentier [***]	[***]

Title	Application No.	Filing date	Assignee	Applicable License Agreement if not owned by Company
Methods and Compositions for RNA-Directed Site-Specific DNA Modification	61/716,256	October, 19, 2012	UC Berkeley/UCSF/ U Vienna/ E. Charpentier [***]	[***]
Methods and Compositions for RNA-Directed Site-Specific DNA Modification	61/757,640	January 28, 2013	UC Berkeley/UCSF/ U Vienna/ E. Charpentier [***]	[***]
Compositions and Methods for Modulating Transcription	61/765,576	February 15, 2013	UC Berkeley/UCSF/ U Vienna/ E. Charpentier [***]	[***]
Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription	PCT/US2013/032589	March 15, 2013	UC Berkeley/UCSF/ U Vienna/ E. Charpentier [***]	[***]
Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription	13/842,859	March 15, 2013	UC Berkeley/UCSF/ U Vienna/ E. Charpentier [***]	[***]
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	

Title	Application No.	Filing date	Assignee	Applicable License Agreement if not owned by Company
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	

Exhibit C

Intellia Payments Under Caribou Pre-Existing In-License

As set forth in further detail in the Wageningen Agreement and where any asterisked term used below is as defined therein:

- Intellia will owe a royalty on Net Sales* of Products covered by the Assigned Patents* in the Intellia Field as follows:
  - [***] of Net Sales* up to [***] in any calendar year and [***] thereafter, in each case subject to third party royalty stacking, and to the royalty payment suspension provision as set forth in the Wageningen Agreement.
- Beginning on [***] Intellia will owe [***] of the minimum annual royalty of [***] owed by Caribou to Wageningen as set forth in the Wageningen Agreement. Any such payment by Intellia will be credited against the royalty due by Intellia pursuant to the above in this Exhibit C for the annual period in which the minimum payment is due.

As set forth in further detail in the UC/Vienna License:

- Intellia will owe a royalty on Net Sales* of Products covered by the Licensed Patent Rights* in the Intellia Field at the rate of:
  - [***] of Net Sales* until such time as the Net Sales* of Products exceed [***] in each Annual Period* in the Intellia Field, and [***] thereafter in such Annual Period* in the Intellia Field
  - [***] of Net Sales* of companion diagnostics for Products in the Intellia Field until such time as the Net Sales* of such companion diagnostic exceed [***] in each Annual Period* in the Intellia Field, and [***] thereafter in such Annual Period* in the Intellia Field

in each of the above cases subject to third party royalty stacking, and to the royalty payment suspension provision of the UC/Vienna License.

- Intellia will pay the following milestones triggered by an activity of Intellia, its Affiliates or its Sublicensees with respect to a Product, unless the requirements of Section 5.1.4 of the UC/Vienna License have been previously satisfied by Caribou or any other party:

[***]

- Intellia will owe [***] of the [***] annual maintenance fee beginning on [***] the UC/Vienna License and ending on [***] the first sale of a Licensed Product* or Licensed Service*.
- Beginning on [***] the first sale of a Licensed Product* or Licensed Service*, Intellia will owe [***] of the minimum annual royalty of [***] owed by Caribou to The Regents as set forth in the UC/Vienna License. Any such payment by Intellia will be credited against the royalty due by Intellia pursuant to the above in this Exhibit C for the annual period in which the minimum payment is due.

Exhibit D

In-License Addendum

See Exhibit C

[***]

Exhibit 10.17

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

AMENDMENT NO. 1 TO LICENSE AGREEMENT

This Amendment No. 1 to License Agreement (this "Amendment") is made and entered into as of February 2, 2016 (the "Amendment Date"), and amends that certain License Agreement, dated as of July 16, 2014, as amended or supplemented through the Amendment Date (the "License Agreement"), by and between Caribou Biosciences, Inc. ("Caribou") and Intellia Therapeutics, Inc. ("Intellia") (as successor in interest to Intellia, LLC under the License Agreement). Each of Caribou and Intellia may be referred to herein as a "Party" or together as "Parties." Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the License Agreement.

WHEREAS, Section 8.14 of the License Agreement provides that the License Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by both Caribou and Intellia;

[***]

WHEREAS [***] the Parties desire to amend the License Agreement as more specifically set forth in this Amendment;

NOW THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows to be effective as of the Amendment Date:

1. Exhibit C of the License Agreement is hereby amended to delete all of the text before:

"As set forth in further detail in the UC/Vienna License":.

2. Section 2.7(b)(i) of the License Agreement is hereby amended by adding the following at the end of such Section:

"Furthermore, in consideration for Intellia's rights granted herein [***], Intellia will owe to Caribou a royalty [***] on Net Sales [***] of Products [***] in the Intellia Field. [***]"

3. To the extent not expressly amended by this Amendment, the License Agreement, as amended, remains in full force and effect. [***]

4. This Amendment may be executed in one or more counterparts, each of which will be deemed an original, and all of which together will be deemed to be one and the same instrument. Facsimile or PDF execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by such Party.

IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Amendment No. 1 to License Agreement as of the Amendment Date.

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz, Ph.D
President & CEO

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessan Bermingham
Nessan Bermingham, Ph.D
President & CEO

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.18

ADDENDUM TO LICENSE AGREEMENT

This Addendum to License Agreement (this Addendum") is made and entered into as of February 2, 2016 (the "Addendum Date"), and amends that certain License Agreement dated as of July 16, 2014, as amended or supplemented through the Amendment Date (the "License Agreement"), by and between Caribou Biosciences, Inc. ("Caribou") and Intellia Therapeutics, Inc. (as successor in interest and assignee of Intellia, LLC, and herein thereafter referred to as "Intellia"). Each of Caribou and Intellia may be referred to herein as a "Party" or together as the "Parties." Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the License Agreement.

WHEREAS, Caribou and Pioneer Hi-Bred International, Inc. ("Pioneer") have entered into that certain Amended and Restated Collaboration and License Agreement, dated as of July 13, 2015, as may be amended or restated (the "Pioneer Agreement"), pursuant to which Caribou has been granted certain rights and licenses under proprietary and intellectual property rights of Pioneer and its affiliates, including E.I. du Pont de Nemours & Company ("DuPont"):

WHEREAS, the fields in which Caribou has been granted certain rights and licenses under the Pioneer Agreement include [***] the Intellia Field;

WHEREAS, pursuant to Caribou's obligations and Intellia's rights under Section 2.7(a) of the License Agreement, Caribou notified Intellia [***] of its execution of the Pioneer Agreement as a New In-License (as defined in the License Agreement), and Intellia notified Caribou [***] of its election to take the benefit of such New In-License; and

WHEREAS, the Parties wish to enter into this Addendum to memorialize the terms and conditions applicable to such New In-License.

NOW, **THEREFORE**, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows to be effective as of the Addendum Date:

1. This Addendum is an Included In-License Addendum as set forth in Section 2.7(a) of the License Agreement, and, as of the Addendum Date, the Pioneer Agreement is a Caribou Included In-License, as defined in Section 2.7(a) and a Caribou In-License as defined in Section 1.7 of the License Agreement. Asterisked terms used in this Addendum shall have the meanings set forth in the Pioneer Agreement.

2. From the Addendum Date, DuPont Pioneer Background IP*, DuPont Pioneer Background Confidential Information,* Pioneer's and its Affiliates" rights in Program Results,* and Caribou's and its Affiliates' rights in Program Results* are added to Caribou IP and included in the scope of the licenses granted to Intellia in the Intellia Field under Section 2.1 of the License Agreement for the duration of the License Term,* and, after expiration of the Pioneer Agreement, such licenses will become non-exclusive, perpetual, irrevocable, fully paid-up and royalty-free.

3. Milestone Payments.

    (a) For so long as Caribou's license in the [***] is exclusive and such payments required under the Pioneer Agreement, Intellia will pay the following milestone payments to Caribou, as a pass-through to Pioneer, for [***] of Intellia, its Affiliate or its Sublicensee in the Intellia Field. Each milestone payment shall be payable [***] upon the [***] achievement of the corresponding milestone event, except as expressly set forth in Section 3(vii).

[***]

    (b) Intellia acknowledges that Caribou owes the above milestone payments to Pioneer within [***] of the occurrence of the corresponding milestone events, and, if due by Intellia, agrees to pay the above milestone payments to Caribou within [***] of the occurrence of the corresponding milestone events by Intellia, its Affiliate or Sublicensee.

    (c) Intellia will provide Caribou written notice within [***] after achievement of a milestone event set forth in Section 4(a).

4. Intellia's rights under Sections 4.1(h)(i), 4.2(g)(i) and 4.3 of the License Agreement will extend to all Patents within [***] as provided by the Pioneer Agreement.

5. Intellia's obligation to maintain the DuPont Pioneer Background Confidential Information in confidence will cease [***].

6. To the extent not expressly supplemented by this Addendum, the License Agreement remains in full force and effect.

7. This Addendum may be executed in one or more counterparts, each of which together will be deemed an original, and all of which together will be deemed to be one and the same instrument. Facsimile or PDF execution and delivery of this Addendum by either Part) will constitute a legal, valid and binding execution and delivery of this Addendum by such Party.

IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Addendum to the License Agreement as of the Addendum Date

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz

Name: Rachel E. Haurwitz, Ph.D.

Title: President & CEO

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessan Bermingham

Name: Nessan Bermingham, Ph.D.

Title: President & CEO

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.20

CONSENT TO ASSIGNMENTS, LICENSING AND COMMON OWNERSHIP AND

INVENTION MANAGEMENT AGREEMENT FOR

A PROGRAMMABLE DNA RESTRICTION ENZYME FOR GENOME EDITING

UC Case No: BK-2012-115
CRISPR Reference: CHARPENTIER-2012
Caribou Reference: UC-UV Agreement

This Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement for a Programmable DNA Restriction Enzyme for Genome Editing (the "Invention Management Agreement," "IMA" or "Agreement") is effective as of December 15, 2016 (the "Effective Date"), and is by and among the following individual and entities:

Dr. Emmanuelle Charpentier, an individual having an address at the Max Planck Institute for Infection Biology, Department of Regulation in Infection Biology, Chariteplatz 1, 10117 Berlin, Germany, ("Charpentier");

The Regents of the University of California, a California public corporation, having its statewide administrative offices located at 1111 Franklin Street, Twelfth Floor, Oakland, CA 946075200, United States, acting through its Office of Technology Licensing, at the University of California, Berkeley, 2150 Shattuck Avenue, Suite 510, Berkeley, CA 94704-1347, United States ("Regents");

University of Vienna, having an address at Universitatsring 1, A-1010 Vienna, Austria, acting through its office of Research Services and Career Development, University of Vienna, Berggasse 7, 2nd floor, 1090 Vienna, Austria ("Vienna");

CRISPR Therapeutics AG, a Swiss company (Aktiengesellschaft) having an address at Aeschenvorstadt 36, CH-4051 Basel, Switzerland ("CRISPR");

ERS Genomics Ltd., a limited liability company incorporated in Ireland and having an address at 88 Harcourt Street, Dublin 2, Ireland ("ERS");

TRACR Hematology Ltd., a limited liability company incorporated in England & Wales and having an address at 85 Tottenham Court Road, London W1T 4TQ, United Kingdom ("TRACR");

Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710, United States ("Caribou"); and

Intellia Therapeutics, Inc., a Delaware corporation, having an address at 40 Erie Street, Suite 130, Cambridge, MA 02139, United States ("Intellia"); each of the foregoing is individually referred to as a "Party" to this Agreement, and collectively as "Parties" to this Agreement.

PART A.
BACKGROUND AND RECITALS

A-1. As set forth herein, all the Parties have certain interests in the patents and patent applications defined and set forth in Exhibit A (the "Patent Applications"), including technologies and/or products described or claimed in the Patent Applications (the "Inventions"), whether as inventor(s) and/or co-inventor(s), assignee(s), and/or licensees.

A-2. Charpentier has certain rights in the Patent Applications as an inventor and/or co-inventor thereof and has not assigned her rights in the Patent Applications to any entity or institution, such rights being referred to herein as "Charpentier's Rights." Charpentier has delegated her rights with respect to the development, management and enforcement of the Patent Applications (individually and collectively "Invention Management Rights") to CRISPR and ERS. In particular, Charpentier has delegated to CRISPR Invention Management Rights (including without limitation her rights of invention management under this Agreement as well as certain corresponding obligations including without limitation the duty to pay costs and fees associated with the Patent Applications and related

proceedings), except for certain Patent Applications for which ERS has been delegated Invention Management Rights by Charpentier ("ERS Patent Delegation" and "ERS-Delegated Patent Applications," each as described in Exhibit B). Each of CRISPR and ERS is referred to herein as a "Charpentier Delegee" and collectively as the "Charpentier Delegees." (For clarity, Charpentier has not delegated to TRACR any Invention Management Rights and TRACR is not a Charpentier Delegee.)

A-3. Charpentier has exclusively licensed her commercialization rights in the Patent Applications, including her rights to commercialize products and methods described and/or claimed in the Patent Applications, to CRISPR, ERS and TRACR (pursuant to the "CRISPR License," the "ERS License" and the "TRACR License"), each of CRISPR, ERS and TRACR being individually and collectively the "Charpentier Licensee(s)" and each of the CRISPR License, the ERS License and the TRACR License, being individually and collectively the "Charpentier License(s)," each Charpentier License being subject to Charpentier's retained non-transferable right, without the right for Charpentier to license or sublicense, for her to use the Inventions for her own research purposes and in her own non-commercial research collaborations to which she is party.

A-4. Regents has certain rights in the Patent Applications as a co-owner by virtue of assignments (the "Assignments to Regents") of any and all rights, title and interests of the following inventors and/or co-inventors in the Patent Applications (either directly, or through the Howard Hughes Medical Institute ("HHMI") in the case of certain rights of Jennifer Doudna, Martin Jinek and Wendell Lim): Jennifer Doudna, Martin Jinek, James H. Doudna Cate, Wendell Lim and/or Lei S. Qi (the "Regents Assignors"), such rights being referred to herein as "Regents' Rights."

A-5. Vienna has certain rights in the Patent Applications as a co-owner by virtue of an assignment (the "Assignment to Vienna") of any and all rights, title and interest of inventor and/or co-inventor Krzysztof Chylinski in the Patent Applications (the "Vienna Assignor"), such rights being referred to herein as "Vienna's Rights."

A-6. Regents' Rights are subject to obligations to HHMI, and any license or sublicense to the Regents' Rights is subject to obligations to HHMI, including HHMI's paid-up, non-exclusive, irrevocable license to use the Inventions for research purposes ("HHMI's Retained Rights"), Regents' Rights also are subject to the U.S. Government rights, as described in 35 U.S.C. §§ 200-212, and Regents' Rights and Vienna's Rights are subject to a retained right to practice the Inventions on their own behalf and allow other educational and non-profit institutions to use the Inventions for research and educational purposes.

A-7. Regents represents its own interests with respect to Invention Management Rights in the Patent Applications, and Regents has also been authorized by Vienna (under an "Inter-Institutional Agreement," attached hereto as Exhibit D) to take the lead in management of patent prosecution and licensing with respect to the Patent Applications on behalf of Vienna, and such Inter-Institutional Agreement is not affected by provisions of this Agreement.

A-8. Regents and Vienna have exclusively licensed their commercialization rights in the Patent Applications pursuant to an agreement with Caribou (the "Caribou License"), and Caribou has granted a sublicense of certain of its rights in a defined field of human therapeutics to Intellia (the "Intellia Sublicense"), the Caribou License and the Intellia Sublicense being individually and collectively the "Regents License(s)," and Caribou and Intellia being individually and collectively the "Regents Licensee(s)." Regents Licenses are not affected by any provision of this Agreement and, in the exercise of rights and performance of obligations under this Agreement, Regents and Regents Licensees shall comply with all obligations in Regents Licenses.

A-9. Additionally, Caribou, Intellia and the Charpentier Licensees have granted sublicenses to the Patent Applications to other third parties, who are not parties to this Agreement.

A-10. Charpentier, Regents and Vienna are individually referred to as a "Co-Owner" and collectively as the "Co-Owners." Charpentier's Rights, Regents' Rights, and Vienna's Rights are collectively referred to as the "Patent Rights." Each of Regents and CRISPR, or any of their authorized representatives, is sometimes individually referred to herein as an "Invention Manager" and collectively referred to herein as the "Invention Managers"; provided, however, that ERS shall be the Invention Manager in the stead of CRISPR with respect to ERS-Delegated Patent Applications and, in the case of ERS-Delegated Patent Applications, shall be deemed to be an Invention Manager

together with Regents in connection with the procedures set forth under Section C-1.3(b) and mediation or arbitration under Section D-1.2. Each of CRISPR, ERS, TRACR, Caribou and Intellia is sometimes individually referred to herein as a "Licensee" and multiply or collectively referred to herein as "Licensees," and their licenses (i.e. the Charpentier Licenses and the Regents Licenses) are sometimes individually, multiply or collectively referred to herein as "License(s)."

WHEREAS, it has been and it remains the mutual desire of the Parties to enter into this Agreement to cooperate regarding development and management of the Patent Rights and to facilitate the full commercial exploitation of their rights in the Patent Applications, including by permitting the licensing and sublicensing of the same in order to develop and market products based upon or employing the Inventions both in the United States and in other jurisdictions worldwide;

NOW, THEREFORE, and in consideration of the commitments provided herein, the Parties agree as follows:

PART B.
CONSENT TO ASSIGNMENTS, LICENSING AND MAINTENANCE OF COMMON OWNERSHIP INTERESTS

B-1. **CONSENT TO ASSIGNMENTS**

B-1.1 Charpentier consents, retroactively to the greatest extent required and permitted by applicable laws in the jurisdictions in which the Patent Applications have been filed, to the Assignments to Regents by Regents Assignors, in each case without application of any rights of accounting, compensation or remuneration or other consideration, reporting, notification, assignment "buy-in" rights (e.g., rights of pre-emption), or other rights or qualifications reserved in connection with such assignments under applicable laws or governmental regulations (such rights collectively referred to as "Rights Arising in Connection with Assignments"). To the extent that such consent to the Assignments to Regents cannot be applied retroactively in certain jurisdictions in which the Patent Applications have been filed, and/or additional documentation or assistance is required in order to perfect such assignments of rights, Charpentier agrees to assist Regents as reasonably required and at its expense in the perfection of such assignments.

B-1.2 Charpentier consents, retroactively to the greatest extent required and permitted by applicable laws in the jurisdictions in which the Patent Applications have been filed, to the Assignment to Vienna by the Vienna Assignor, in each case without application of any Rights Arising in Connection with Assignments. To the extent that such consent to the Assignment to Vienna cannot be applied retroactively in certain jurisdictions in which the Patent Applications have been filed, and/or additional documentation or assistance is required in order to perfect such assignments of rights, Charpentier agrees to assist Vienna as reasonably required and at its expense in the perfection of such assignment.

B-1.3 Going forward, and subject to any restrictions provided for in the Inter-Institutional Agreement with respect to Vienna and Regents (which shall only have effect as between Vienna and Regents), each Co-Owner permits each other Co-Owner to assign its interests in the Patent Applications without application of any Rights Arising in Connection with

Assignments, provided that (a) no assignment shall be permitted to be made to an Adverse Claimant (as defined in Section C-1.3) except by mutual agreement of all of the Co-Owners, and (b) any assignee(s) must fully assume and agree to be bound by all of the assignor's obligations under this Agreement, to which they shall become a signatory, in connection with which, each other Co-Owner shall be deemed to have consented to such assignment (to the extent necessary in accordance with applicable laws in the jurisdictions in which the Patent Applications have been filed) and shall provide any additional documentation or assistance required in order to perfect such assignment of rights, and assist as reasonably required by the assignor, at the assignor's expense, in the perfection of such assignment.

B-2. **CONSENT TO LICENSING AND SUBLICENSING**

B-2.1 The Co-Owners provide the following consents: (a) Charpentier consents (i) to Regents' and Vienna's grant of a license to Caribou under Regents' Rights and Vienna's Rights to research, develop, make, have made, use, sell, have sold, offer for sale, import and practice (individually and collectively to "Commercialize") Inventions, subject to any limitations and qualifications contained in the Caribou License, and (ii) to Caribou's grant of a sublicense of certain of its rights to Intellia, subject to any limitations and qualifications contained in the Intellia Sublicense, and to any further grants of sublicenses pursuant to the Caribou License or the Intellia Sublicense; (b) Regents and Vienna consent to Charpentier's grant of licenses to CRISPR, TRACR and ERS under Charpentier's Rights to Commercialize Inventions, subject to any limitations and qualifications contained in the CRISPR License, the TRACR License and the ERS License, respectively, and consent to any sublicenses granted pursuant to the Charpentier Licenses, and to any further grants of sublicenses pursuant to such licenses or sublicenses; (c) all of the Co-Owners agree that going forward, each of the Co-Owners may provide licenses under their rights in the Patent Applications and/or transfer or otherwise modify such licenses without requirement for any further consent of the other Co-Owners; (d) each licensee of a Co-Owner and each of their sublicensees shall be entitled to sublicense through multiple tiers, subject to any restrictions provided in their individual licenses and/or sublicenses and/or the Inter-Institutional Agreement with respect to Vienna and Regents, and provided that for each license or sublicense of Regents' rights, such license or sublicense shall include licensing terms as are required pursuant to the Regents' agreement with HHMI; and (e) except as explicitly provided herein no accounting, compensation or remuneration or other consideration, reporting, or notification, is owed, or shall be owed, by one Co-Owner or by its licensees or sublicensees to the other Co-Owners or to their licensees or sublicensees for prior or future licensing and sublicensing of the Patent Applications; provided that in connection with the foregoing consents by the Co-Owners under (a-d), each Co-Owner does not by virtue of this Section B-2.1 consent to any licensing, sublicensing or transfer of the Patent Rights by the other Co-Owners or their licensees or sublicensees, past or future, to an Adverse Claimant (as defined in Section C-1.3), with respect to any Patent Rights, other than in accordance with the provisions set forth in Section C-1.3(b); and provided further that if any of the preceding consents cannot be granted prospectively in any particular jurisdiction in which the Patent Applications have been filed, and/or additional documentation or assistance is required in connection with approval of such licenses and sublicenses, each Co-Owner and (if applicable) other Party agrees to provide such consents when and as required, [***] in connection with the approval of such licenses or sublicenses.

B-2.2 The foregoing consents, to the extent they apply to licenses or sublicenses already provided ("Preexisting Licenses and Sublicenses"), shall be deemed to apply retroactively to the greatest extent permitted by applicable laws in the jurisdictions in which the Patent Applications have been filed, in each case without application of any rights of Co-Owners with respect to accounting, compensation or remuneration or other consideration, reporting, notification, or other rights or qualifications reserved in connection with such licenses under applicable laws or governmental regulations. To the extent that such consent to the Preexisting Licenses and Sublicenses cannot be applied retroactively in certain jurisdictions in which the Patent Applications have been filed, and/or additional documentation or assistance is required in connection with approval of such licenses or sublicenses, each Co-Owner and (if applicable) other Party agrees to provide such consents when and as required, [***] in connection with the approval of such licenses and sublicenses.

B-2.3 Subject to the foregoing and with regard to exclusivity, Regents and/or Vienna and/or their licensees or sublicensees are permitted to have granted and to grant licenses and sublicenses that are "exclusive" (whether in general or by a field of the Patent Rights (a "Field") or territory for example) by such licensor(s) solely as to rights held by them, and Charpentier's consent to such license(s) and sublicense(s) as provided herein shall neither exclude nor limit Charpentier's or Charpentier's Licensees' rights to practice and/or Commercialize Inventions (including without limitation the granting of licenses and sublicenses through multiple tiers as contemplated in this Section B-2); and similarly Charpentier and/or her licensees or sublicensees are permitted to have granted and to grant licenses that are exclusive by such licensor(s) as to rights held by them, and Regents' and Vienna's consents to such license(s) as provided herein shall neither exclude nor limit Regents' or Vienna's or Regents Licensees' rights to practice and/or Commercialize Inventions (including without limitation the granting of licenses and sublicenses through multiple tiers as contemplated in this Section B-2. The resulting holders of licenses or sublicenses with overlapping or co-extensive exclusive scope (whether in general or by particular field or territory for example) originating from both Regents and Vienna on the one hand and Charpentier on the other hand are regarded as co-exclusive licensee(s) or sublicensee(s) ("Co-Exclusive Licensee(s)") for purposes of this Agreement. For the avoidance of doubt, such Co-Exclusive Licensee(s) shall be free (to the extent empowered by their own rights) to practice and/or Commercialize Inventions but shall not be required to enter into agreements among themselves and/or with current or prospective licensees or sublicensees to effectively provide individual licensees and/or sublicensees with additional levels of exclusivity or co-exclusivity by such mutual agreements.

B-3. **MAINTENANCE OF COMMON OWNERSHIP INTERESTS**

B-3.1 It is the understanding and intent of the Co-Owners that the Patent Applications have been and will continue to be jointly owned among them regardless of inventorship, which understanding and intent are reflected in the following provisions:

(a) [***].

(b) [***].

(c) Each Party hereby consents to, if and to the extent required in any and all applicable jurisdictions, and agrees to provide any required assistance to the Co-Owner(s) to enable them to provide the applicable assignment or license to the Co-Owners jointly in accordance with Section B-3.1(b)(i) and (ii), respectively.

B-4. **RESPONSIBILITIES AND COOPERATION OF CO-OWNERS**

B-4.1 The responsibilities of Charpentier, UC and Vienna in their capacities as Co-Owners are as defined in this Part B. Charpentier, UC and Vienna shall execute any documents (including without limitation terminal disclaimers) and provide any assistance in their capacities as Co-Owners as may be required in order to effectuate the Invention Management Activities jointly approved by the Invention Managers, or alternatively through dispute resolution, as described in Part C and Section D-1, respectively.

B-5. **PROMOTION OF SCIENCE**

B-5.1 A common goal of the Parties is to promote the progress of science and the useful arts, and nothing in this Agreement is intended to impair or prevent the Parties from licensing, sublicensing and/or assigning the Inventions in a manner that does so.

PART C.
INVENTION MANAGEMENT ACTIVITIES

C-1. **DEVELOPMENT AND DEFENSE OF THE PATENT APPLICATIONS**

C-1.1 The Invention Managers will cooperate in good faith regarding the development and defense of the Patent Applications, including without limitation filing, prosecution, issuance, and maintenance of Patent Applications, as well as interferences, oppositions, reissues, reexaminations, derivations, inter partes reviews, post-grant reviews, and other post-grant proceedings in the U.S. or foreign patent offices involving any Patent Applications; revocation, cancellation, or nullity actions involving any Patent Applications that do not involve issues of infringement; and patent term restorations, patent term adjustments and patent term extensions involving any Patent Applications (individually and collectively the "Patent Activities"); provided, however, that in no event will a Party be required to join as a named party in any suit, counterclaim or other proceeding, absent a separate written agreement, into which a Party in its sole discretion may enter.

C-1.2 Regents, on behalf of itself and Vienna, shall have the right to appoint one U.S. law firm for U.S. prosecution and for developing and transmitting instructions to foreign counsel (as provided below), and one U.S. interference law firm in connection with the shared rights of the Patent Applications ("Regents Co-Counsel"). CRISPR, on behalf of itself and Charpentier and ERS, shall have the right to appoint one U.S. law firm for U.S. prosecution and for developing instructions to be transmitted by Regents Co-Counsel to foreign counsel (as provided below), and one U.S. interference law firm in connection with the shared rights of the Patent Applications ("Charpentier Co-Counsel"); provided, however, that in connection with the prosecution of ERS-Delegated Patent Applications and/or interference proceedings directed to

ERS-Delegated Patent Applications, ERS, on behalf of itself and Charpentier and CRISPR, shall have the right to appoint one U.S. law firm for U.S. prosecution and for developing instructions to be transmitted by Regents Co-Counsel to foreign counsel (as provided below) and/or one U.S. interference law firm in connection with the shared rights of such Patent Applications ("ERS Co-Counsel"). Each of these law firms is referred to individually and collectively as "Co-Counsel." If any of Regents, ERS or CRISPR is an Abandoning Party, as set forth in Section C-1.5, then such Abandoning Party shall lose its rights under this Section C-1.2 to appoint its Co-Counsel with respect to such Non-elected Patent or Non-elected Application (as defined in Section C-1.5), and only the Prosecuting Party may appoint counsel to represent its interests in connection with such particular Patent Rights. In all cases, the Party entitled to appoint Co-Counsel shall have the right to replace its Co-Counsel at any time in its sole discretion or to have one law firm for both U.S. prosecution and U.S. interference matters. Co-Counsel will be directed by the Invention Managers and shall confer and endeavor to reach positions in furtherance of the Patenting Objectives (as defined in Section C-1.4(b)) regarding the shared Patent Activities, including without limitation agreeing with respect to Regents Co-Counsel instructions to a single foreign counsel in each applicable jurisdiction outside of the United States. Drafts, submissions, and correspondence and any supporting documents or information pertaining thereto relating to Patent Activities ("Prosecution Matters") will be supplied to, or made available to be reviewed, by all Parties and Parties counsel (or, in the case of Prosecuting Parties pursuant to Section C-1.5, the Parties having rights in such cases and their counsel), if permitted pursuant to their License, provided that such communications being deemed (unless otherwise expressly provided by the participating Parties) to be Common Interest Information as defined in, and subject to, the CLIA (as defined in Section D-4.1). Co-Counsel shall consider and respond in good faith to timely received comments or questions from the Parties or their counsel regarding the Patent Activities. Final submissions in any Prosecution Matter will be dependent upon approval by the Invention Managers (or, in the case of Prosecuting Parties pursuant to Section C-1.5, the Parties having rights in such cases), subject to the procedures of Section C-1.4 in the event of a failure to reach agreement on a particular course of action.

C-1.3 Certain third parties have filed and are pursuing patent applications identified in Exhibit E that claim one or more of the Inventions (such third parties and their exclusive licensees being individually and collectively referred to as "Adverse Claimants" and such patent applications and/or resulting patents and their foreign counterparts being individually and collectively referred to as "Adverse Filings"). In connection with the Adverse Claimants' pursuit of Adverse Filings in the United States, one or more patent interferences may be declared between or among one or more Patent Applications and one or more patents and/or patent applications comprising Adverse Filings, a first interference (Interference No. 106,048) having recently been declared in connection with the first issued U.S. patents comprising Adverse Filings. In addition, other adverse procedures or proceedings have already occurred and/or may occur in the United States and/or in other jurisdictions, including without limitation: (i) application of the Adverse Filings as allegedly anticipating and/or rendering obvious inventions claimed in the Patent Applications, (ii) challenges by Adverse Claimants as to the patentability of one or more aspects of the Patent Rights, (iii) challenges by or assertions made by the Invention Managers as to priority of invention and/or patentability of one or more aspects of the Patent Applications vis-a-vis the Adverse Filings, and/or (iv) challenges undertaken by the Invention Managers as to priority of invention and/or patentability of the Adverse Filings (individually and collectively "Adverse Proceedings"). In order to coordinate the Patent Activities and promote the development and defense of the Patent Applications and/or the Patent Rights vis-a-vis certain patent applications filed by third parties that purport to claim one or more of the Inventions, and in consideration of the other commitments and obligations undertaken by the Parties to this Agreement, the Parties acknowledge and agree as follows:

(a) In the event that the Invention Managers are successful in one or more of such Adverse Proceedings they undertake, and/or the Invention Managers elect to settle one or more of such Adverse Proceedings, they shall establish terms of compensation by the Adverse Claimants and any of their licensees [***];

(b) The Parties acknowledge and agree that their commitments to each other under this Agreement, including without limitation the consents provided by each Co-Owner to Licenses granted by other Co-Owner(s) and to sublicenses granted by other Co-Owner(s)' Licensee(s), in each case for the benefit of such other Co-Owner(s) and their licensee(s) and sublicensee(s) and without any additional accounting, compensation or remuneration or other consideration, reporting, or notification, the commitments to maintain common ownership regardless of inventorship, and the interests of the Parties and their respective licensee(s) and sublicensee(s) in the successful development and management of the Patent Applications and in the success of the Adverse Proceedings initiated by or asserted against the Co-Owners, are based in substantial part and dependent upon cooperation with respect to the Adverse Proceedings and coordination with respect to Adverse Filings that are expressly related to the patentability

or validity of the Patent Rights (including without limitation potential settlement and/or licensing discussions), and further acknowledge and agree that their common interests with respect to the Adverse Proceedings and Adverse Filings could potentially become divergent and materially adverse to each other, and/or cooperation with respect to the Adverse Proceedings materially affected, in the event that a Party unilaterally (i.e., without inclusion or agreement of other affected or potentially affected Parties) pursued or entered into an agreement (which shall include written and oral, binding and non-binding contracts, licenses, term sheets, options and any other form of agreement that could be legally considered such) related to the Patent Applications or Adverse Filings with an Adverse Claimant (or an individual or entity holding some or all of an Adverse Claimant's proprietary interests in the Adverse Filings as a transferee or licensee with rights to grant licenses in the Adverse Filings) (a "Unilateral Transaction with Adverse Claimants") during the pendency of any Adverse Proceedings or their potential appeal, until the last final, non-appealable decision by an applicable court, agency, or similar binding dispute resolution organization making a determination regarding the last Adverse Proceeding (the "Term of the Adverse Proceedings"), and accordingly the Parties agree that they have not concluded and will only engage in such settlement, licensing or other discussions ("Resolution") related to or enter into a Unilateral Transaction with Adverse Claimants during the Term of the Adverse Proceedings as follows: (i) [***]; (ii) [***]; or (iii) [***]; provided further that, in each of these cases, the Parties engaged in the Resolution (the "Resolution Parties") [***]. For the avoidance of doubt, notwithstanding this Section C-1.3 or any other provision of this Agreement, other than a Unilateral Transaction with an Adverse Claimant during the Term of the Adverse Proceedings, each Party shall be free to enter into any agreement with an Adverse Claimant; and, further, with the exception of interferences involving the Patent Rights and the Adverse Filings, nothing in this Agreement shall prevent, or create a duty of coordination or cooperation upon, any Party from challenging the patentability, validity, enforceability or infringement of any Adverse Filing; and, further, that a licensee or sublicensee that is not a Party to this Agreement as defined on page 1 (or a majority-owned subsidiary or other commonly-controlled affiliate of such a Party), such as a non-Party sublicensee of one of the Parties to this Agreement, is not restricted in any way by, or subject to, Section C-1.3 of this Agreement;

(c) Failure to adhere to any of the commitments and undertakings of this Section C-1.3 will be considered a material breach of this Agreement, for which any Party or Invention Manager may seek specific performance in accordance with the procedures of Section D-1.2; and

(d) Notwithstanding anything to the contrary in this Agreement, and in view of the Parties' common goal expressed in Section B-5.1, nothing in this Agreement prevents, impairs or otherwise affects the ability of third-party beneficiary HHMI to enter into any agreement or arrangement relating to scientific research involving HHMI or any of its officers, employees and/or agents.

C-1.4 If the Invention Managers or Prosecuting Parties cannot agree regarding cooperation or a proposed course of action as set forth in Sections C-1.1 through C-1.3, as applicable, or on a costs and fees estimate as set forth in Section C-2.1:

(a) The Invention Managers will refer the disagreement to [***], or their equivalent, to discuss in a good faith attempt to resolve the disagreement; provided, however, that any resolution shall not breach the Invention Managers' respective Licenses without the prior written agreement from each Licensee that is a party to a License that would be breached.

(b) If the Invention Managers still disagree after the discussion in Section C-1.4(a), they shall promptly and in good faith appoint mutually agreeable independent patent counsel ("Patent Rights Trustee") neutral to the Parties, who will make the decision [***] (individually and collectively the "Patenting Objectives"), and will consider, and to the extent reasonably advisable incorporate, the requests, comments, and suggestions of the Invention Managers. Regents on the one hand, and the Charpentier Delegee on the other hand shall each pay such Patents Rights Trustee directly for [***] of all costs and expenses incurred by the Patent Rights Trustee. The Invention Managers may, by mutual written agreement, replace the Patent Rights Trustee at any time.

(c) If action has to be taken by a Co-Counsel appointed under Section C-1.2 in a short time frame in order to preserve rights, including without limitation making timely filings within an administrative proceeding, such Co-Counsel shall use all [***] efforts to immediately notify the Invention Managers and Patent Rights Trustee (if one has been selected), and, if due to time constraints it is not feasible to first obtain agreement of all Invention

Managers or decision from the Patent Rights Trustee, if the Invention Managers have not agreed on a response, such Co-Counsel will take such action as is required to preserve those rights in light of the previously agreed objectives of the Invention Managers for that proceeding and the Patenting Objectives as specified in Section C-1.4(b).

C-1.5 If an Invention Manager elects to not pursue (through a decision to not nationalize or otherwise), to abandon, or to cease prosecution or maintenance of any Patent Application (each a "Non-elected Application" or "Non-elected Patent") in any country, either on a country-by-country basis or in connection with a divisional or other continuing Patent Application that an Invention Manager does not wish to support and share responsibility for associated expenses, such Invention Manager (the "Abandoning Party") will provide at least thirty (30) days' prior written notice to the other Invention Manager and all Parties of such intention to not pursue, to abandon, or to cease prosecution or maintenance, following which notification the Abandoning Party shall be under no continuing obligation to share in future corresponding costs and expenses as provided under Section C-2. Following such written notification, the other Invention Manager (the "Prosecuting Party") may elect to pursue or continue prosecution of and/or maintenance of the Non-elected Patent/Non-elected Application at its sole cost and expense and the Abandoning Party (and its licensees and any sublicensees) shall have no rights in the Non-elected Patent/Non-elected Application, subject only to Regents' and Vienna's retained right to allow non-profit entities to use the Inventions for research and educational purposes, and further, with respect to Regents, subject to the rights of HHMI and the U.S. Government, if applicable, as provided in Section A-6, and Charpentier's retained right with respect to research activities of Charpentier as provided in Section A-3.

(a) During the [***] phase of [***], Regents and CRISPR as Charpentier Delegee jointly elected certain non-U.S. countries in which to pursue regional or national phase counterparts (the "Jointly Elected Jurisdictions" as identified in Exhibit F); and CRISPR as Charpentier Delegee elected certain additional jurisdictions in which to pursue regional or national phase counterparts that Regents did not elect to enter (the "Additional Jurisdictions" as identified in Exhibit F). Regents has a one-time option to add the Additional Jurisdictions, exercisable during the [***] period following the Effective Date of this Agreement, by written notification to CRISPR, provided that Regents shall upon exercise be responsible for [***] of all costs and fees incurred in connection with the Additional Jurisdictions at the time of exercising the option, and shall be responsible for [***] of such costs and fees on an ongoing basis.

(b) In the event that Regents does not exercise the option to add the Additional Jurisdictions, then CRISPR as Charpentier Delegee will be responsible for [***] of the costs and fees incurred in connection with the Additional Jurisdictions and only Charpentier, CRISPR and other Charpentier Licensees and their sublicensees will have patent rights in such non-elected Additional Jurisdictions; provided, however, that the Charpentier Delegee shall apprise the other Invention Manager of any newly-cited art and any new arguments (i.e., those that are not substantially repetitive of or consistent with arguments already made in connection with Patent Activities) to be made in connection with such Additional Jurisdiction patent applications and patents, and provide at least [***] advance written notice with a copy of such proposed arguments so that the other Invention Managers have an opportunity to review and provide suggestions regarding said proposed arguments.

C-1.6 Notwithstanding any other provision of this Agreement, no Invention Manager may abandon the prosecution or the maintenance of any of the Patent Applications without giving prior written notice to the other Invention Manager. Furthermore, and for the avoidance of doubt, the provisions of Section C-1.5 shall not relieve any Party of any additional procedural requirements or other obligations it may have to its licensor(s) with respect to the abandoning or ceasing of prosecution or maintenance of any Patent Application pursuant to its License or otherwise.

C-1.7 Applications for patent term extension, patent term restoration, SPCs (as defined in Exhibit C), and listing in regulatory publications (such as the FDA Orange Book and any foreign equivalent) will be at the sole discretion of the Party whose approved product, or whose licensee's or sublicensee's approved product, is first proposed and statutorily ready to be relied upon for such filings in a particular jurisdiction, after written notice to the other Parties. Any other Party will promptly execute any documents reasonably required to effect such applications.

C-2. **COST SHARING**

C-2.1 The Invention Managers will discuss and agree on expected costs and fees of Regents Co-Counsel performing Patent Activities in accordance with the Patenting Objectives, based on [***] estimates of Regents Co-Counsel, and will establish and deliver to Caribou a corresponding budget for Patent Activities, which will be updated [***] in consultation with Regents Co-Counsel, subject to the procedures of Section C-1.4 in the event of a failure to reach agreement. Regents Co-Counsel shall notify the Invention Managers if the costs and fees are expected to exceed an approved [***] budget and will confer and agree on any updates to the [***] budget, also subject to the procedures of Section C-1.4 in the event of a failure to reach agreement. Regents Co-Counsel shall use reasonable efforts not to exceed [***] budgets or updates, but the Parties recognize that it is impossible to predict with accuracy or control how Patent Activities will progress, or the costs and fees that will be required to accomplish necessary tasks, and accordingly, notwithstanding any budget limitations, Regents Co-Counsel shall take such action as Regents Co-Counsel deems necessary in light of the previously-agreed objectives of the Invention Managers for a proceeding and the Patenting Objectives. Budgets and updates will be made available for review by all Parties and shall be deemed to be Common Interest Information (as defined in the CLIA).

C-2.2 If and to the extent it has not already done so, CRISPR will pay [***] of costs and fees associated with the Additional Jurisdictions within [***] of the Effective Date. CRISPR will pay [***] of such total within [***] (a) Regents' decision to not exercise its option with respect to such Additional Jurisdictions under Section C-1.5(a), or (b) the termination of the option period. Within [***] of the exercise of its option with respect to such Additional Jurisdictions under Section C-1.5(a), Regents will pay [***] of costs and fees associated with the Additional Jurisdictions.

C-2.3 In accordance with, and subject to, a separate agreement by and between CRISPR and Caribou ("Cost-Sharing Agreement," attached hereto as Exhibit G) that will be executed contemporaneously with the execution of this Agreement, CRISPR, on its behalf and on behalf of Charpentier and ERS, agrees to reimburse, in the amounts set forth in the Cost-Sharing Agreement, Caribou for costs and fees associated with Patent Activities performed or to be performed by Regent Co-Counsel that Caribou has paid, or is required to pay Regents under the Caribou License. CRISPR and Caribou will promptly provide the Parties with any amendments to the Cost-Sharing Agreement. Any material breach by CRISPR or Caribou of the Cost-Sharing Agreement also shall constitute a material breach of this Agreement. For avoidance of doubt, other than as set forth in the Cost-Sharing Agreement or in their respective Licenses or by separate written agreement, no Party shall be responsible for paying the costs or fees of another Party's counsel.

C-2.4 In any country and/or for any divisional or continuing application, for which only one Invention Manager undertakes Patent Activities pursuant to Section C-1.5, the corresponding expenses and fees shall be [***], in accordance with Section C-1.5.

C-3. **RECORDS AND REPORTS**

C-3.1 Regents shall keep complete, true, and accurate accounts of all expenses and shall permit the other Invention Manager to allow its agents or a certified public accounting firm that is reasonably acceptable to Regents to examine its books and records, and those of its underlying billers in the case of rebilling, in order to verify the payments owing under this Agreement. The requesting Invention Manager shall pay the cost of each examination and shall request no more than [***] examination per [***], unless an examination shall reveal a discrepancy of greater than [***], in which case Regents shall pay the cost of examination and the requesting Invention Manager shall be entitled to request [***] examinations.

C-3.2 No less than [***] each [***] during the Term, Regents Co-Counsel responsible for Patent Activities, which as of the Effective Date of this Agreement is [***], shall deliver to the Invention Managers and Licensees a written report setting forth the status of all Patent Applications; provided, however, if Regents are an Abandoning Party pursuant to Section C-1.5, then the Prosecuting Party(ies)' counsel shall deliver to Regents a written report setting forth the status of the Non-elected Application(s) or Non-elected Patent also at no less than [***] each [***] during the Term.

C-4. **PATENT INFRINGEMENT**

C-4.1 In the event that an Invention Manager or other Party (to the extent of the actual knowledge of the licensing professional responsible for administration of this Agreement) learns of the infringement of any of the Patent Rights that it deems to be substantial ("Substantial Infringement"), such Invention Manager or other Party shall promptly notify all of the other Parties of such infringement by providing written evidence of the infringement ("Infringement Notice").

C-4.2 If the efforts of the Invention Managers and/or other Parties, individually or jointly, are not successful in abating such infringement within [***] after the Infringement Notice is sent, then each Invention Manager may (subject, in the case of Vienna, to limitations undertaken in connection with the Inter-Institutional Agreement between Vienna and Regents; and, in the case of all Parties, subject to any rights, limitations and obligations that a Party may have in its License):

(a) [***]; and/or

(b) [***]; and/or

(c) [***].

Notwithstanding the foregoing, in the event that a statute, regulation, or other legal provision (such as, for example, the Drug Price Competition and Patent Term Restoration Act (Hatch-Waxman), as amended, the Biologics Price Competition and Innovation Act, amended, or similar laws outside of the United States) require that an infringement or similar action be commenced prior to the [***] period set forth above, the [***] period will be shortened to effectively be [***] prior to the final deadline imposed by the applicable legal requirement. Within [***] days after the Infringement Notice, the Party seeking to shorten the [***] period due to an applicable legal requirement shall inform the other Parties of the need and basis for shortening the time period. A Party will immediately forward to the other Parties any and all notices of infringement received pursuant to such regulatory procedures.

C-4.3 [***].

C-4.4 A legal action brought pursuant to Section C-4.2 ("Legal Action") will be at the full expense of [***], and all recoveries obtained as a result of any Legal Action, whether by settlement or otherwise, will be shared according to the following order: (a) reimbursement of all costs [***]; provided that any separate agreements between particular Parties and their licensee(s) or sublicensee(s) and/or Co-Exclusive Licensee(s) related to the potential sharing of amounts received by them, and any separate agreements between Regents and HHMI related to sharing of costs, expenses and revenues, shall be unaffected by the foregoing terms of this Agreement.

C-4.5 [***].

PART D.
MISCELLANEOUS PROVISIONS

D-1. **GOVERNING LAWS AND DISPUTE RESOLUTION**

D-1.1 The scope and validity of any Patent Applications are governed by the applicable laws of the relevant jurisdiction to which the Patent Applications relate. This Agreement shall otherwise be governed by New York law, without regard to its conflict of laws principles; provided that all Parties shall be entitled to all defenses available to it under New York law and, additionally, Regents shall also be entitled to all defenses available to it under California law.

D-1.2 Due to the nature and subject matter of this Agreement, as well as commitments already undertaken by the Parties or which may be undertaken by the Parties with respect to their licensees, and by their licensees with respect to sublicensees, a termination of this Agreement for material breach by another Party would not place the non-breaching Parties and/or their beneficiaries in the same or an equivalent position to that which they would be in without the breach. Accordingly, the Parties agree that specific performance is deemed to be the appropriate remedy in order to ensure that the Parties' respective commitments and obligations undertaken to each other, and for the

further benefit of their licensees and sublicensees, be fulfilled as agreed to herein, absent the Parties' mutual agreement to another form of remedy or to an amendment to this Agreement. It is also the desire of the Parties to avoid the need to litigate in order to address any potential dispute between them regarding the subject matter of this Agreement, which would likewise be expected to be significantly disruptive to the interests of the Parties and to their preexisting and future commitments with respect to, and the activities of, their licensees and sublicensees. Accordingly, in the case of any dispute, claim or controversy arising under this Agreement, including any matter that is not resolved by the Parties and/or the Invention Managers, and/or the Patent Rights Trustee pursuant to the procedure specified in Section C-1.4, or in the event that the Invention Managers should be unable to reach agreement regarding the selection and appointment of a Patent Rights Trustee pursuant to Section C-1.4(b), or if the Patent Rights Trustee should be unable or unwilling to resolve a particular contested matter, each of the forgoing being an "Unresolved Dispute," then the Invention Managers shall participate in mediation designed to encourage them to settle the matter between them, and if the Invention Managers are unsuccessful in settling the matter through mediation, then the Invention Managers and other Parties shall submit the matter to binding arbitration which shall be directed to ensure that the Invention Managers' and other Parties' specific commitments and obligations to each other are fulfilled as originally agreed herein and with consideration of the Patenting Objectives as specified in Section C-1.4(b), unless the Invention Managers and other Parties mutually agree to waive or modify any particular commitments or obligations as provided herein. Mediation and arbitration shall be conducted in accordance with the rules and procedures as set forth in Exhibit H (Dispute Resolution); and for the avoidance of doubt, no Party shall initiate or pursue alternative legal proceedings or remedies in connection with an Unresolved Dispute other than according to the procedures as set forth in Section C-1.4, this Section D-1.2, and the accompanying Exhibit H.

D-1.3 [***].

D-1.4 Notwithstanding anything to the contrary in this Agreement, binding arbitration shall not be effective as to any interests (including, without limitation, rights or obligations) of third-party beneficiary HHMI without HHMI's prior written consent to binding arbitration on a case-by-case basis.

D-2. **NOTICES**

D-2.1 Any notice required or permitted to be given to the Parties hereto is properly given if delivered, in writing, in person, sent by registered mail or courier, with copies by email (which shall not alone constitute notice), to the following addresses, or to such other addresses as may be designated in writing by the Parties from time to time during the term of this Agreement:

Prof. Dr. Emmanuelle Charpentier
Max Planck Institute for Infection Biology
Department of Regulation in Infection Biology
Chariteplatz 1
10117 Berlin
Germany
(with copies by email to: LEGAL@crisprtx.com and Legalnotices@ersgenomics.com)

CRISPR Therapeutics AG
Aeschenvorstadt 36
CH-4051 Basel
Switzerland
Attention: Chief Legal Officer
(with a copy by email to: LEGAL@crisprtx.com)

ERS Genomics Ltd.
88 Harcourt Street
Dublin 2
Ireland
(with a copy by email to: Legalnotices@ersgenomics.com)

TRACR Hematology Ltd.
85 Tottenham Court Road
London W1T 4TQ

United Kingdom
Attention: Chief Legal Officer
(with a copy by email to: LEGAL@crisprtx.com)

Regents of the University of California
Office of Technology Licensing
2150 Shattuck Avenue, Suite 510
Berkeley, CA 94704-1347
United States
Attention: Director
(Case No. BK-2012-115)

University of Vienna
Research Services and Career Development
Berggasse 7, 2nd floor
1090 Vienna
Austria
Attention: Vice-Rector for Research and International Affairs
(with a copy by email to: techtransfer@univie.ac.at)
Caribou Biosciences, Inc.
2929 7th Street, Suite 105
Berkeley, CA 94710
United States
Attention: Chief Legal Officer
(with a copy by email to: legalnotices@cariboubio.com)

Intellia Therapeutics, Inc.
40 Erie Street, Suite 130
Cambridge, MA 02139
United States
(with a copy by email to: NTLANOTICE@intelliatx.com)

D-2.2 If Regents or Vienna terminates their Inter-Institutional Agreement, or if Charpentier, CRISPR or ERS materially change the rights or obligations of CRISPR or ERS as Invention Manager under this Agreement, they will promptly notify the other Parties of such change in writing, and the Parties agree to amend this Agreement if and as necessary to reflect such change.

D-3. **TERM AND TERMINATION**

D-3.1 This Agreement is in full force and effect from the Effective Date and remains in effect for the life of the last-to-expire patent or last-to-be-abandoned Patent Application, whichever is later (the "Term"), unless earlier terminated by operation of law or by agreement of the Parties.

D-4. **CONFIDENTIALITY AND COMMON INTEREST INFORMATION**

D-4.1 Subject to the California Public Records Act as it affects Regents, the Parties shall hold each other's confidential and/or proprietary business and patent prosecution information in confidence using at least the same degree of care as that Party uses to protect its own confidential and/or proprietary information of a like nature, and shall comply with their responsibilities under the Confidential Common Legal Interest and Nondisclosure Agreement, entered into as of [***], a copy of which is attached hereto as Exhibit I, as amended by the First Amendment to the Confidential Common Legal Interest and Disclosure Agreement [***] ("CLIA"), [***].

D-4.2 Notwithstanding Section D-4.1, nothing in this Agreement in any way restricts or impairs the right of Parties to use, disclose, or otherwise deal with any information or data that:

(a) recipient can demonstrate by written records was previously known to it;

(b) is now, or becomes in the future, public knowledge other than through acts or omissions of recipient;

(c) is lawfully obtained without restrictions by recipient from sources independent of the disclosing Party that were not under any obligations of confidentiality to the disclosing Party;

(d) was made independently without the access to or use of proprietary information received hereunder as evidenced by contemporaneous written records; or

(e) is required by law to be disclosed, provided the Party required to disclose notifies the other Parties promptly upon learning about any legal requirement that purports to compel disclosure and thereafter cooperates with and assists the nondisclosing Parties in the exercise of any rights to protect the confidentiality of all or portions of its confidential or proprietary information before any tribunal or governmental agency, and in the event disclosure is required to disclose only the minimum amount of information required to be disclosed.

D-4.3 The confidentiality obligations of the recipient under these terms will remain in effect for [***] after the termination or expiration date of this Agreement.

D-4.4 This Agreement may be disclosed by a Party on a confidential basis, under terms no less restrictive than Section D-4.1, to actual or potential contracting parties and advisors (i.e., actual or potential licensees, investors, acquirors, joint venturers and the like, and/or auditors, counsel and financial or other advisors), and as required by applicable law or governmental regulation.

D-5. **MISCELLANEOUS PROVISIONS**

D-5.1 Use of Names and Trademarks; Publicity. This Agreement does not confer any right to use any name, trade name, trademark, or other designation of any Party to this Agreement (including contraction, abbreviation, or simulation of any of the foregoing) in advertising, publicity, or other promotional activities, and the use of the name, “The Regents of the University of California” or the name of any campus of the University of California is prohibited in such contexts; provided that the Parties agree to cooperate to develop agreed forms of language for press release and related publicity that may be employed by the Parties in connection with this Agreement, to which Regents and other Parties agree to be named as a party in connection with this Agreement. The name, trade name, trademark, or other designation of HHMI in advertising, publicity or other promotional activities shall be not be used without HHMI’s written consent.

D-5.2 No Waiver or Amendment Other than in Writing. No provision of or right under this Agreement shall be deemed to have been waived or amended by any act or acquiescence on the part of any Party, or any of its licensees or sublicensees, directors, employees, consultants, advisors or agents, but only by an instrument in writing signed by an authorized representative of each Party. No waiver by any Party of any breach of this Agreement by another Party shall be effective as to any other breach, whether of the same or any other term or condition and whether occurring before or after the date of such waiver. The Parties irrevocably agree that this Agreement may only be amended by a writing executed by all of the Parties.

D-5.3 No Implied License. This Agreement does not confer by implication, estoppel, or otherwise any license or rights under any patents of any Party other than the Patent Applications, regardless of whether such patents are dominant or subordinate to the Patent Applications.

D-5.4 No Joint Venture, Partnership or Ability to Bind Other Parties. This Agreement does not create by implication or otherwise any joint venture or partnership between or among the Parties, nor does it confer any authority to bind another Party.

D-5.5 Terminology and Interpretation.

(a) Headings and captions are for convenience only and are not be used in the interpretation of this Agreement.

(b) The definitions of the terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine, and neuter forms. The word “will” shall be construed to have the same meaning and effect as the word “shall.” The word “any” shall mean “any and all” unless otherwise clearly indicated by context. The word “including” shall be construed as “including without limitation,” whether or not the latter is expressly stated. The word “or” is disjunctive but not necessarily exclusive.

(c) Unless the context requires otherwise, (i) any definition of or reference to any agreement, instrument, or other document herein shall be construed as referring to such agreement, instrument, or other document as from time to time amended, supplemented, or otherwise modified (subject to any restrictions on such amendments, supplements, or modifications set forth herein or therein), (ii) any reference to any applicable laws herein shall be construed as referring to such applicable laws as from time to time enacted, repealed, or amended, (iii) any reference herein to any person or entity shall be construed to include the person’s or entity’s successors and assigns, and (iv) all references herein to Parts, Sections, or Exhibits, unless otherwise specifically provided, shall be construed to refer to Parts, Sections, and Exhibits of this Agreement.

(d) Each of the Parties acknowledges and agrees that this Agreement has been diligently reviewed by and negotiated by and between them, that in such negotiations each of them has been represented by competent counsel, and that the final agreement contained herein, including the language whereby it has been expressed, represents the joint efforts of the Parties and their counsel. Accordingly, in interpreting this Agreement or any provision hereof, no presumption shall apply against any Party as being responsible for the wording or drafting of this Agreement or any such provision, and ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored such provision.

D-5.6 Complete Agreement. Other than the Inter-Institutional Agreement (Exhibit D), the CLIA (Exhibit I) and the Licenses, this Agreement (including Exhibits A, B, C, E, F, G, H and J) constitutes the entire agreement, both written and oral, by and among the Co-Owners, and all other prior agreements regarding the subject matter of this Agreement, both written and oral, express or implied, are hereby cancelled. For the avoidance of doubt, this Agreement does not affect any License. Additionally, as provided in Section A-6, Regents’ Rights are subject to certain U.S. Government rights and also obligations to HHMI. Nothing in this Agreement affects such U.S. Government rights. Nor does anything in this Agreement affect any rights or obligations as between HHMI and Regents under any other agreement, nor shall any assignment, license or sublicense granted pursuant to or as a result of this Agreement limit HHMI’s Retained Rights. Any assignment, license or sublicense of Regents’ Rights granted pursuant to or as a result of this Agreement shall, moreover, be reviewed by Regents or Regents Licensees, as appropriate, to ensure inclusion of HHMI’s licensing terms.

D-5.7 HHMI. HHMI is not a party to this Agreement and has no liability to the Parties under this Agreement or to any licensee, sublicensee or assignee of rights by virtue of this Agreement, but HHMI is an intended third-party beneficiary of, and has the right to enforce in its own name, any provision of this Agreement affecting HHMI. This Section D-5.7 shall survive any termination or expiration of the Agreement.

D-5.8 Severability. All of the covenants and provisions of this Agreement are severable. In the event that any of these covenants or provisions shall for any reason be adjudged, decreed, or ordered by any arbitrator or court of competent jurisdiction to be invalid or unenforceable in any respect, such covenants or provisions shall be deemed modified to the extent necessary to render them valid and enforceable, while maintaining the expressed intention of the parties to the greatest extent permissible, and such judgment, decree, or order shall not affect, impair or invalidate any of the remaining covenants or provisions of this Agreement.

D-5.9 Successors and Assignees. This Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective acquirors, successors (including any personal successors by law or otherwise), permitted assignees, heirs, executors, transferees, administrators, receivers, or other corporate successors or representatives of the Parties.

D-5.10 Authority. Each Co-Owner (to the extent of actual knowledge of the licensing professional responsible for the administration of this Agreement as of the Effective Date, as applicable) represents and warrants that it currently owns the rights, title, and interest in and to the Patent Applications in order to carry out its undertakings to the other

Parties and obligations hereunder. Each Party represents and warrants that this Agreement is legally binding upon such Party, enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which such Party is currently bound. Each Party agrees that it will not enter into any agreement, instrument or understanding, oral or written, that is inconsistent with the terms of this Agreement.

D-5.11 Counterparts. This Agreement may be executed in counterparts (whether delivered by facsimile, electronically by image or PDF or otherwise) with the same effect as if each Party had executed the same physical document. All such counterparts shall be deemed an original, shall be construed together and shall constitute one and the same instrument.

[Signature Page Follows]

The Parties hereto have executed this Agreement as of the Effective Date, as attested by the signatures below of authorized representatives of each Party.

DR. EMMANUELLE CHARPENTIER

Signature	/s/ Emmanuelle Charpentier
Date	December 15, 2016

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Signature	/s/ Javed Afzal
Name	Javed Afzal
Title	Associate Director
Date	December 6, 2016

UNIVERSITY OF VIENNA

Signature	/s/ Heinz Fassmann
Name	Heinz Fassmann
Title	Vice Rector for Research and International Affairs
Date	December 6, 2016

CRISPR THERAPEUTICS AG

Signature	/s/ Rodger Novak
Name	Rodger Novak
Title	CEO
Date	December 13, 2016

ERS GENOMICS LTD.

Signature	/s/ Derek O'Reilly
Name	Derek O'Reilly
Title	Director
Date	December 6, 2016

TRACR HEMATOLOGY LTD.

Signature	/s/ Tyler Dylan-Hyde
Name	Tyler Dylan-Hyde
Title	Chief Legal Officer
Date	December 15, 2016

CARIBOU BIOSCIENCES, INC.

Signature	/s/ Rachel E. Haurwitz
Name	Rachel E. Haurwitz, Ph.D.
Title	President and CEO
Date	December 2, 2016

INTELLIA THERAPEUTICS INC.

Signature	/s/ Nessan Bermingham
Name	Nessan Bermingham
Title	CEO and President
Date	December 15, 2016

LIST OF EXHIBITS

Exhibit A	Patent Applications
Exhibit B	ERS Patent Delegation
Exhibit C	Definition of SPCs
Exhibit D	Inter-Institutional Agreement between The Regents of the University of California and University of Vienna (copy)
Exhibit E	Adverse Claimants
Exhibit F	Non-U.S. Filings
Exhibit G	Cost-Sharing Agreement
Exhibit H	Dispute Resolution
Exhibit I	Confidential Common Legal Interest and Nondisclosure Agreement (copy)
Exhibit J	First Amendment to the Confidential Common Legal Interest and Nondisclosure Agreement

Exhibit A to
Invention Management Agreement

Patent Applications

Patent Applications refer to any and all of the following:

(i) any of the following U.S. and PCT patent applications:

Patent Application Number	Filing Date	UC Case Number
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

(ii) any U.S. patent application that claims priority to or common priority with any of the above-referenced patent applications, regardless of inventorship, including but not limited to, any divisions, continuations, or continuations-in-part thereof;

(iii) any non-U.S. patent applications claiming priority to or common priority with any of the above-referenced patent applications, or constituting the national phase counterparts of the above-referenced PCT application, as well as divisionals or continuations of such non-U.S. patent applications;

(iv) any U.S. or non-U.S. patents issued from any of the foregoing applications; and

(v) any reissues, renewals, substitutions, registrations, revalidations, reexaminations, patent term restorations, patent term extensions, patent term adjustments, supplementary protection certificates (“SPCs”) and the like arising from any of the foregoing cases.

Exhibit B to
Invention Management Agreement

ERS Patent Delegation

ERS has been delegated certain invention management rights by Charpentier (the "ERS Patent Delegation") within the ERS field. The delegated rights are:

1. Prosecution and maintenance rights for Patent Applications that have applicability or utility exclusively in the ERS field ("ERS-Delegated Patent Applications") and has comment rights in respect of all other Patent Applications that have applicability or utility in the ERS field.
2. Patent enforcement rights in the ERS field for all Patent Applications including any Patent Applications that have applicability or utility in both the ERS and CRISPR/TRACR fields.

The ERS field is [***]. The CRISPR and TRACR fields means:

Researching, developing, making, using or selling:

(1) Therapeutic Products - [***], or

(2) Diagnostic Products - [***].

Companion Diagnostics means companion diagnostic tools and/or diagnostic assays developed and used to (i) [***], (ii) [***], and/or (iii) [***].

Covered Product means [***].

Covered Animal means an animal [***].

Covered Animal-Derived Product means [***].

Covered Method means any process or method, [***].

Invention means the invention entitled "[***]" as described in the Patent Applications, including all improvements thereto that are disclosed in the Patent Applications.

Technology means the Invention, the Patent Applications and certain know-how.

Exhibit C to
Invention Management Agreement

Definition of SPCs

"SPCs" refer to Supplementary Protection Certificates that extend patent terms based on regulatory filings for marketing authorization undertaken and approved in the United Kingdom (UK), countries of the European Union (EU) and the European Economic Area (EEA) and certain other countries in Europe including, but not limited to, Switzerland, and equivalents thereto available in other jurisdictions (including, but not limited to, Australia, Canada (effective with the Comprehensive Economic and Trade Agreement (CETA) implementation), Chile, Costa Rica, Israel, Japan, Russia and Commonwealth of Independent States (CIS) countries, Singapore, South Korea and Taiwan), as well as "pediatric extensions" to SPC terms available in the UK, EU/EEA and other countries, and other such patent term extensions currently available or which become available during the Term.

Exhibit D to
Invention Management Agreement

Inter-Institutional Agreement between The Regents of the University of California and University of Vienna (copy)

[***]

Exhibit E to
Invention Management Agreement

Adverse Claimants

The Adverse Claimants are the applicants and the direct, first-tier exclusive licensees of patent applications and/or issued patents claiming priority to or common priority with the applications identified below, which claim subject matter comprising all or portions of the Patent Rights:

Patent Application Number	*Filing Date / Claimed Priority Date*	*Inventors*	*Applicant(s) / Direct, First-Tier Exclusive Licensee(s) (known as of the Effective Date)*
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

and further including any U.S. patent application that claims priority to or common priority with such patent applications, regardless of inventorship, including but not limited to, any divisions, continuations, or continuations-in-part thereof; any non-U.S. patent applications claiming priority to or common priority with any of the above-referenced U.S. patent applications, or constituting the national phase counterparts of the above-referenced PCT application, as well as divisionals or continuations of such non-U.S. patent applications; and any U.S. or non-U.S. patents issued thereon; as well as reissues, renewals, substitutions, registrations, revalidations, reexaminations, patent term restorations, patent term extensions, patent term adjustments, SPCs arising from any of the preceding cases, and the like.

Exhibit F to
Invention Management Agreement

Non-U.S. Filings

The "Jointly Elected Jurisdictions" are the following:

[***]

The "Additional Jurisdictions" are the following:

[***]

Exhibit G to
Invention Management Agreement

Cost-Sharing Agreement

This Cost-Sharing Agreement ("Agreement"), having a date of December 15, 2016 ("Effective Date"), is by and between CRISPR Therapeutics AG, having a corporate address at Aeschenvorstadt 36, CH-4051 Basel, Switzerland ("CRISPR"), and Caribou Biosciences, Inc., having a corporate address at 2929 7th Street, Suite 105, Berkeley, CA 94710 USA ("Caribou"). CRISPR and Caribou are each referred to as a "Party," and jointly as the "Parties."

WHEREAS, CRISPR and Caribou are parties to a Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement for a Programmable DNA Restriction Enzyme for Genome Editing Agreement ("IMA"), to which this Agreement is attached as Exhibit G thereto and having the same date as this Agreement;

WHEREAS, pursuant to an Exclusive License Agreement, by and among Caribou, University of Vienna ("Vienna"), and The Regents of the University of California ("Regents"), dated April 16, 2013 ("Caribou License"), Caribou has been reimbursing and will continue to reimburse Regents for patent costs and attorney fees for prosecuting and maintaining the Patent Applications (as defined in the IMA), including [***] relating to [***], as set forth in the Caribou License (collectively, "Patent Costs");

WHEREAS, as of the date of this Agreement, [***] is Regents' counsel for [***], and [***] is Regents' counsel for all other Patent Applications (collectively, "Regents' Counsel");

WHEREAS, the Parties desire to come to a resolution regarding reimbursement of past and future Patent Costs of Regents' Counsel; and

NOW, THEREFORE, in consideration of the mutual agreements contained in this Agreement, and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

1. Within [***] of the Effective Date of this Agreement, CRISPR will reimburse Caribou $[***], as an adjusted settlement of [***] of the Patent Costs invoiced by UC and paid by Caribou during the period [***] through [***]. Caribou will provide wire instructions to CRISPR within [***] of the Effective Date.

2. For all invoices that Caribou received or will receive from UC for Patent Costs that were not paid by Caribou on or before [***], and which are: (i) invoiced by UC to Caribou before [***], for which payment was not due until after [***]; (ii) invoiced by UC to Caribou after [***], but prior to the effective date of the IMA (whether or not payment was or is due before the effective date of the IMA), or (iii) invoiced by UC to Caribou after the effective date of the IMA, Caribou will invoice CRISPR for [***] of the invoiced amount within [***] after Caribou's payment to Regents, together with a copy of the invoice(s) received from Regents and proof of payment to Regents. Within [***] after receipt of each such Caribou invoice, CRISPR will wire the amount set forth on the invoice to Caribou.

3. As long as CRISPR has and is making the timely payments as set forth in Sections 1 and 2, Caribou will indemnify and defend CRISPR in any collection actions taken by Regents against CRISPR for Patent Costs.

4. In the event that Caribou is required to take legal action to collect amounts due to it by CRISPR under this Agreement, CRISPR will pay all costs, including attorneys' fees, incurred in such collection.

5. Reimbursed Patent Costs shall not include fees or costs of attorneys retained by and/or representing CRISPR, Caribou, or any third party (including but not limited to Emmanuelle Charpentier and ERS Genomics Ltd.). As of the Effective Date of this Agreement, Patent Costs include those of [***], [***], and all foreign associates prosecuting the Patent Applications under the instruction of, and invoiced by, [***] (collectively and individually, the "Foreign Associates"), in accordance with Section C of the IMA. CRISPR acknowledges that Regents may, at its sole discretion, replace [***], [***], or any of the Foreign Associates as Regents' Counsel, and that, in such event, CRISPR's obligations with respect to the Patent Costs associated with replacement Regents' Counsel (including Foreign Associates) shall be subject to this Agreement.

6. This Agreement shall be governed in accordance with the Governing Laws and Dispute Resolution procedures as provided in Section D of the IMA.

7. This Agreement may be executed in any number of counterparts, including facsimile or scanned PDF documents. Each such counterpart, facsimile, or scanned PDF document shall be deemed an original instrument and all of which together shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the Parties have caused this Cost-Sharing Agreement to be executed by their respective authorized representations as of the Effective Date.

CRISPR Therapeutics AG

By: /s/ Rodger Novak
Rodger Novak
Chief Executive Officer

Date: December 13, 2016

Copies of Invoices to be delivered to:
Legal@crisprtx.com
Finance@crisprtx.com

Address for Notice:
CRISPR Therapeutics Limited
85 Tottenham Court Road
London W1T 4TQ
United Kingdom

With a copy (which shall not constitute notice) to:
Legal@crisprtx.com

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz, Ph.D.
President & Chief Executive Officer

Date: December 2, 2016

Copies of remittance statements to be delivered to:
accounts.receivable@cariboubio.com

Address for Notice:
Caribou Biosciences, Inc.
2929 7th Street, Suite 105
Berkeley, CA 94710
United States

With a copy (which shall not constitute notice) to:
legalnotices@cariboubio.com

Exhibit H to
Invention Management Agreement

Dispute Resolution

Disputes of any nature between the Parties arising under this Agreement (a "Dispute") will be resolved exclusively through mediation and binding arbitration as set forth in this Exhibit H ("Mediation/Arbitration"), including without limitation the determination of the scope or applicability of this Agreement to arbitrate. The Parties agree and acknowledge that any good faith dispute in Mediation/Arbitration will not be deemed to be a material breach of this Agreement. For the purposes of provisions (b) through (j), the term "Parties" shall mean the Parties involved in the Dispute.

(a) The Mediation/Arbitration will be conducted in [***] and shall be administered by JAMS (formerly Judicial Arbitration and Mediation Services, Inc.) strictly in accordance with the below-described process.

(b) The Parties will appoint a single mediator and a single arbitrator to be selected by mutual agreement or, if the Parties are unable to agree on an arbitrator within [***] after such matter is referred to Mediation/Arbitration (all days being calendar days unless otherwise specifically provided herein), the Parties will request that JAMS select the arbitrator, in each case satisfying the criteria set forth below to the maximum extent possible.

(c) In all cases:

1. involving a disagreement over patent matters (including without limitation the conduct of the Patent Activities), the arbitrator should be a patent attorney registered to practice by the U.S. Patent & Trademark Office with [***];
2. not involving patent matters patent matters, the arbitrator should be an attorney with [***].

Under no circumstances shall the arbitrator be a current or former employee or consultant of any of the Parties, an affiliated company that controls or is controlled by or is under common control with any of the Parties, an exclusive licensee of any of the Parties, or a non-exclusive licensee of any of the Parties that is involved in the dispute or has a direct interest in its outcome. In all cases, the arbitrator shall be fluent in the English language.

(d) Within [***] after such matter is referred to Mediation/Arbitration, each Party will provide the arbitrator with its one proposed resolution and a written memorandum in support of its position regarding the Dispute and its proposed resolution (each an "Opening Brief), which shall not exceed thirty (30) pages in total. In connection with the submission of an Opening Brief, a Party may also submit documentary evidence in support thereof which had both (x) existed prior to commencement of such Mediation/Arbitration and (y) been shared with the other Parties at least [***] prior to the date for submission of the Opening Brief. The arbitrator will provide each Party's Opening Brief, along with copies of any supporting documentation, to the other Parties after he or she has received an Opening Briefs from all Parties. The arbitrator shall not consider any untimely Opening Brief(s) received after the arbitrator has provided copies of the Opening Briefs received to the other Party(ies).

(e) Within [***] after a Party receives another Party's Opening Brief from the arbitrator, such receiving Party will have the right to submit to the arbitrator a response to the other Party's Opening Brief (each, a "Response Brief), which shall not exceed twenty (20) pages in total. In connection with the submission of a Response Brief, a Party may also submit documentary evidence in support thereof which had both (x) existed prior to commencement of such Mediation/Arbitration and (y) been shared with the other Parties at least [***] prior to the date for submission of the Response Brief. The arbitrator will provide each Party's Response Brief, along with copies of any supporting documentation, if any, to the other Parties after he or she has received a Response Brief from all Parties (or at the expiration of such [***] period if any Party fails to submit a Response Brief).

(f) Within [***] of the timely receipt by the arbitrator of each Party's Response Brief (or expiration of such [***] period if any Party fails to submit a Response Brief), the mediator will conduct a single [***] meeting during which each Party will have present, in addition to its counsel, a person with authority to reach a binding agreement resolving the dispute.

(g) If the dispute is not resolved by mediation within [***] following the meeting referred to in (f) above, the arbitrator will conduct a single [***] hearing during which each Party will have [***] to present its position. At the hearing, each Party will have the right to call up to [***] witnesses, [***] of whom may be an employee, consultant or other advisor to another Party. Each Party will notify the other Parties and the arbitrator of the identity of the witnesses it intends to call at least [***] in advance of the hearing. Notwithstanding the foregoing, the time periods and other aspects of this provision may be modified if (x) the Parties agree to such modification, (y) the arbitrator determines that such modification is reasonably necessary in view of the factual circumstances of the matter to be decided, or (z) if more than two Parties are participating in the Dispute and the arbitrator determines that more than two of the Parties (or sets of Parties) are in good faith seeking different resolutions.

(h) The Parties shall submit Opening Briefs and Response Briefs, as well as any documentary evidence, to the arbitrator in electronic form by midnight Eastern Standard/Daylight Time of the applicable deadline and, if the arbitrator so requests, will also submit a hard copy to the arbitrator.

(i) There shall be no discovery in the Mediation/Arbitration (e.g., document requests, interrogatories, depositions, etc.), except as follows:

1. Opposing Parties may take a deposition of any declarant of the other Party and obtain copies of all documents on which each declarant relies upon in his or her declaration; provided that the Party(ies) taking such deposition must complete questioning of the declarant within [***];

2. As may be ordered by the arbitrator following request(s) of a Party; provided, however, that the arbitrator's decision to grant any discovery shall be subject to the following conditions: (a) the arbitrator must conclude that the requested discovery will result in information that is necessary and essential under applicable laws to reach a fair and equitable decision; no interrogatories or requests to admit shall be allowed under any circumstances; no more than [***] depositions of non-declarants or non-witnesses shall be permitted and the Party seeking

3. the deposition must complete questioning within [***] for each deponent; and no more than [***] document requests shall be allowed, and each request must identify the document(s) sought with particularity (e.g., a Party may request a particular email sent from one individual to another on a certain date, but cannot request all emails sent by a particular individual).

All discovery must be completed prior to [***] in advance of the hearing. If a Party refuses or cannot provide the requested discovery in a timely manner (the "Refusing Party"), such Refusing Party shall lose its right to take discovery (or, if such Refusing Party already took discovery, shall lose its right to present the discovery obtained to the arbitrator) and the arbitrator shall not consider discovery evidence presented by the Refusing Party during the hearing to reach a decision.

The arbitrator will also have the right to perform independent research and analysis and to request any Party to provide additional documentary evidence that existed and was controlled by such Party prior to the arbitrator making such request.

(j) Within [***] of such hearing, or within such other time to which the Parties and the arbitrator agree or the arbitrator determines is reasonably necessary in view of the factual circumstances of the matter to be decided, the arbitrator will deliver his/her decision regarding the Dispute in writing. The arbitrator may but shall not be required to select the resolution or position proposed by one of the Parties. As part of any such decision, the arbitrator may also mandate that the Party or Parties whose proposed resolution is further from the resolution determined by the arbitrator to pay some or all of the other Party's or Parties' reasonable attorneys' fees and expenses in connection with the Mediation/Arbitration, as well as the costs and expenses of such Mediation/Arbitration ("Costs").

(k) Each of the Parties irrevocably and unconditionally submits to the exclusive jurisdiction of the [***] (and, if such federal court rejects jurisdiction for any reason, then solely and exclusively in the state courts of the [***]) solely and specifically for the purposes of compelling arbitration or enforcing the decision in any Mediation/Arbitration, with the proportioning of Costs of any court proceeding to enforce the decision in any Mediation/Arbitration to be established by the arbitrator in connection with the decision of the arbitrator.

Nothing set forth herein shall be deemed to preclude either Party from seeking appropriate judicial injunctive relief from any court of competent jurisdiction in order to prevent immediate and irreparable injury, loss, or damage on a provisional basis, pending a decision on the ultimate merits of any dispute.

Exhibit I to
Invention Management Agreement

Confidential Common Legal Interest and Nondisclosure Agreement (copy)

[***]

Exhibit J to
Invention Management Agreement

First Amendment to the Confidential Common Legal Interest and Nondisclosure Agreement

This First Amendment to the Confidential Common Legal Interest and Nondisclosure Agreement ("First Amendment"), is entered into as of December 15, 2016 (the "First Amendment Effective Date"), [***].

RECITALS

WHEREAS, The Original Parties are parties to that certain Confidential Common Legal Interest and Nondisclosure Agreement (the "CLIA"), dated as of [***]; and

WHEREAS, pursuant to Section D-4.1 of the Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement for a Programmable DNA Restriction Enzyme for Genome Engineering, by and among The Regents, Caribou, TRACR, CRISPR, ERS, Vienna, Charpentier, and Intellia, ("IMA"), [***] and having the same date as this First Amendment, [***] has the right to become part of the CLIA under the terms and conditions set forth in the IMA, the CLIA, and this First Amendment;

NOW, THEREFORE, in consideration of the covenants and agreements contained in this First Amendment, the Parties hereby agree as follows:

1. [***].
2. The Original Parties hereby accept [***] as a Party to the CLIA.
3. Each Original Party acknowledges that the CLIA is in full force and effect and that each such Original Party has no claims, causes of action, defenses, or rights of offset with respect to its obligations under the CLIA.
4. Except as explicitly set forth in this First Amendment, all terms and conditions of the CLIA shall remain in full force and effect, and the CLIA, as modified by this First Amendment, is ratified and confirmed in all respects.
5. This First Amendment may be executed in counterparts (whether delivered by facsimile, electronically by image or PDF or otherwise) with the same effect as if each Party had executed the same physical document. All such counterparts shall be deemed an original, shall be construed together and shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties, through their authorized representatives, have executed this First Amendment to the Confidential Common Legal Interest and Nondisclosure Agreement as of the First Amendment Effective Date.

[Signatures set forth on the following page]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.21

UNIVERSITY OF CALIFORNIA, BERKELEY
OFFICE OF TECHNOLOGY LICENSING

EXCLUSIVE LICENSE

BETWEEN

CARIBOU BIOSCIENCES, INC.

AND

THE UNIVERSITY OF VIENNA

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

METHODS AND COMPOSITIONS FOR RNA-DIRECTED TARGET DNA MODIFICATION

AND FOR RNA-DIRECTED MODULATION OF TRANSCRIPTION

TABLE OF CONTENTS

EXCLUSIVE LICENSE AGREEMENT

This license agreement ("Agreement"), effective as of the date of the last signature below ("Effective Date"), is entered into by and between The Regents of the University of California, a California corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200 acting through its Office of Technology Licensing, at the University of California, Berkeley, having its administrative office at 2150 Shattuck Avenue, Suite 510, Berkeley, California 94720-1620 ("REGENTS"), The University of Vienna, having a business address at Universltatsring 1, 1010, Vienna, Austria acting through its Research Services and Career Development Office; University of Berggasse 7, 2nd floor 1090 Vienna, Austria ("UNIVERSITY OF VIENNA") and Caribou Biosciences, Inc., a Delaware corporation, having a principal place of business at QB3 Garage, MS#3220, Stanley Hall, Rm. 130, Berkeley, California 94720 ("LICENSEE"). REGENTS and UNIVERSITY OF VIENNA shall be referred to together as "LICENSORS."

1. BACKGROUND

1.1 REGENTS and UNIVERSITY OF VIENNA each have an assignment of the intellectual property characterized as "Methods and Compositions for RNA-Directed Target DNA Modification and For RNA-Directed Modulation of Transcription" as described in REGENTS Case No. B2012-115, invented by James Doudna Cate while employed by the University of California, Berkeley, Stanley Qi and Wendell Lim while employed by the University of California, San Francisco, Krzysztof Chylinski while employed by the UNIVERSITY OF VIENNA, Martin Jinek, an employee of the Howard Hughes Medical Institute ("HHMI") and Jennifer Doudna, an employee of the HHMI and a member of the faculty of the University of California, Berkeley, (the "Inventions").

1.2 Reserved

1.3 James Doudna Cate, Stanley Qi, and Wendell Lim assigned their rights in the Inventions to REGENTS.

1.4 Krzysztof Chylinski has assigned his rights in the Inventions to UNIVERSITY OF VIENNA.

1.5 Emmanuelle Charpentier has retained her rights in the Inventions.

1.6 REGENTS have entered into an agreement entitled "inter-Institutional Agreement between the Regents of the University of California and University of Vienna fora Programmable DNA Restriction Enzyme for Genome Editing" (the "REGENTS-VIENNA INTER-INSTITUTIONAL AGREEMENT") with UNIVERSITY OF VIENNA, effective as of August 1, 2012, pursuant to which UNIVERSITY OF VIENNA has granted REGENTS the authority to enter into negotiations with the LICENSEE on behalf of the UNIVERSITY OF VIENNA.

1.7 HHMI assigned its rights in the Inventions to REGENTS [***] and accordingly, REGENTS has the authority to license its entire interest and the entire interest of the UNIVERSITY OF VIENNA in the Invention and any patent rights claiming it. REGENTS have no authority to license Emmanuelle Charpentier's interest or rights in the Inventions.

1.8 [***] HHMI has reserved nonexclusive, paid-up, royalty-free, irrevocable licenses, with no right to sublicense others, to make and use any Invention for research purposes.

1.9 LICENSORS desire to make the Inventions available for public use and benefit.

1.10 LICENSEE desires to obtain certain rights from LICENSORS to sell products related to the Inventions, and REGENTS and UNIVERSITY OF VIENNA are willing to provide such rights to further REGENTS' and UNIVERSITY OF VIENNA'S public use and benefit objectives.

2. DEFINITIONS

2.1 "Affiliate" shall mean any corporation or other business entity that directly or indirectly controls, is controlled by, or is under common control with LICENSEE. Control means ownership or other beneficial interest in 50% or more of the voting stock or other voting interest of a corporation or other business entity: provided however, in any country where the local law will not permit foreign equity participation of a majority ownership or control, control means ownership of other beneficial interest in the maximum percentage of such outstanding stock or voting rights permitted by local law.

2.2 "EDC" means each economically disadvantaged country included on the "Least Developed" countries list established by the United Nations Conference on Trade and Development. Notwithstanding the foregoing, China and India shall not be deemed EDC for purposes of this Agreement.

2.3 "First Anniversary Date" means the date occurring one year after the Effective Date of this Agreement, and each such annual period ("Annual Period") thereafter be defined as Second Anniversary Date, Third Anniversary Date, etc.

2.4 "First Qualified Round" means either (i) receipt by LICENSEE of funding in excess of [***] in aggregate (inclusive of funding received by LICENSEE prior to the date hereof), including equity financing, convertible debt financing, grants, sponsored research, collaboration funding, and payments from Sublicensees or (ii) the acquisition of all or substantially all of LICENSEE's stock, assets or business.

2.5 "Humanitarian Purposes" means (a) the use of Licensed Products and Licensed Services for research and development purposes by any nonprofit organization or other third party, anywhere in the world that has the express purpose of developing the Licensed Products or Licensed Services for use solely for protection from, treatment of, or diagnosis of Neglected Diseases in an EDC, and (b) the use of the Licensed Products or Licensed Services for protection from, treatment of, or diagnosis of Neglected Diseases by any nonprofit organization or other third party for sale solely in an EDC at or below cost.

2.6 Reserved

2.7 Reserved

2.8 Reserved

2.9 Reserved

2.10 "Licensed Field of Use" means all applications of the Licensed Patent Rights. [***]

2.11 "Licensed Method" means any process or method, the use or practice of which, but for the license pursuant to this Agreement, would infringe, or contribute to or induce the infringement of, any Valid Claim under Licensed Patents Rights in that country in which the Licensed Method is practiced.

2.12 "Licensed Patent Rights" means LICENSORS' rights in PCT Patent Application PCT/US2013/032589 filed on March 15, 2013, claiming priority to US Application Nos. 61/652,086 filed May 25, 2012, 61/716,256 filed October 19, 2012, 61/757,640 filed January 28, 2013 and 61/765,576 filed February 15, 2013, and any related patent applications thereto, including, without limitation any and all: provisional, reissue, extension, substitution, division, continuation, and continuation-in-part applications (but only to the extent that claims in the continuation-in-part are entitled to the priority filing date of the parent application),

reexaminations, extensions, renewals, counterpart foreign patent applications, and any patent issuing thereon, and other patents or patent applications that claim priority or common priority with the above (excluding continuations-in-part as provided above). Continuation-in-part applications will not be filed without the reasonable consent of Licensee.

2.13 "Licensed Product" means any product, the manufacture, use, sale, offer for sale, or import of which: a) would require the performance of the Licensed Method; or b) but for the license granted pursuant to this Agreement, would infringe, or contribute to or induce the infringement of, a Valid Claim under Licensed Patent Rights in the territory where the product is manufactured, used, sold, offered for sale or imported.

2.14 "Licensed Service" means a commercial service provided using a Licensed Product or Licensed Method and shall exclude research and development activities.

2.15 "Licensed Territory" means United States of America, its territories and possessions, and any foreign countries where Licensed Patent Rights are licensed to LICENSEE under this Agreement.

2.16 "Material" means the tangible physical Licensed Product(s) listed on Appendix 1 hereto and any progeny or derivatives thereof.

2.17 "Neglected Diseases" means the diseases listed in Appendix 2.

2.18 "Net Sale" means the total gross amount invoiced by LICENSEE on the worldwide sale of Licensed Products, Licensed Services, and Licensed Methods by LICENSEE its Affiliates and any Sublicensees to third parties for the manufacture, use, sale, rental or lease of Licensed Products and Licensed Services in the Licensed Territories, less returns and customary trade discounts actually taken, outbound freight, value added, sales or use taxes, custom duties, and any other deductions not listed above to the extent that such deduction is. After the Effective Date, a new bona fide deduction from gross invoiced sales under U.S. Generally Accepted Accounting Principles (GAAP) to arrive at "net sales". Any sales among Licensee, Affiliates, and Sublicensees should be excluded when calculating Net Sales, provided that any resale to third parties shall be included. With respect to each component constituting a Licensed Product, Licensed Service, or Licensed Method that is sold as part of a system or combination product, such fees, amounts, payments, or other consideration will be equal to the retail value of such component when sold individually. In the event such component is not sold individually, Net Sale will be based upon an allocation to be mutually agreed to in good faith by LICENSORS and LICENSEE, based upon the proportion of the value of such system or combination product reasonably attributable to the Licensed Patent Rights.

2.19 "Sublicensee" shall mean any non-Affiliate third party to whom LICENSEE has granted a sublicense pursuant to this Agreement and shall exclude any third party contractor, manufacturer, or distributor engaged by LICENSEE to perform any licensed activities on LICENSEE's behalf.

2.20 "Valid Claim" means a pending or issued and unexpired claim of a patent included in the Licensed Patent Rights so long as such claim has not been lapsed, cancelled, irrevocably abandoned or declared to be invalid or unenforceable in an unappealable or unappealed decision of a court or other government agency of competent jurisdiction.

3. GRANT OF LICENSE

3.1 Subject to LICENSEE compliance of all terms and conditions set forth in this Agreement, LICENSORS hereby grant, and LICENSEE accepts:

3.1.1 An exclusive license throughout the Licensed Territory under the Licensed Patent Rights to make, have made, use, sell, have sold, or import Licensed Products and Licensed Services (as applicable), and to practice Licensed Methods in the Licensed Field of Use; and

3.1.2 An exclusive license throughout the Licensed Territory to use Material to make, have made, use, sell, have sold, or import Licensed Products and Licensed Services, and to practice Licensed Methods in the Licensed Field of Use. LICENSEE acknowledges that REGENTS is and will remain the sole owner of Material and the title to Material is not transferred to LICENSEE under this Agreement.

3.1.2.1 REGENTS shall provide LICENSEE [***] of Material in quantities deemed appropriate by REGENTS inventor Jennifer Doudna. No additional obligation is required of REGENTS with respect to the provision of additional quantities of Material

3.1.3 LICENSEE may exercise its rights and licenses hereunder through its Affiliate(s); provided that LICENSEE shall be fully responsible for such Affiliate(s)' compliance with this Agreement.

3.2 LICENSORS grant to LICENSEE the right to grant sublicenses to third parties, provided that (i) the Sublicensee agrees to abide by all terms and conditions of this Agreement; (ii) LICENSEE remains fully liable for the performance of its and its Sublicensee's obligations hereunder; [***] (iv) no such sublicense will relieve LICENSEE of its obligations under Article 7 hereof to exercise its own commercially reasonable and diligent efforts to develop and market Licensed Products throughout the Licensed Territory.

3.2.1 Upon termination of this Agreement for any reason, all sublicenses that are granted by LICENSEE pursuant to this Agreement where the Sublicensee is in compliance with its sublicense agreement as of the date of such termination will remain in effect and will be assigned to LICENSORS, except that LICENSORS will not be bound to perform any duties or obligations set forth in any sublicenses that extend beyond the duties and obligations of LICENSORS set forth in this Agreement.

3.3 All rights granted by LICENSORS to LICENSEE under this Agreement are subject to the requirements of 35 U.S.C. 200 et seq., as amended, and implementing regulations and policies. Without limitation of the foregoing, LICENSEE agrees that, to the extent required under applicable law, any Licensed Product used, sold, rented or leased by LICENSEE, an Affiliate or Sublicensee in the United States will be manufactured substantially in the United States subject to any waiver available under applicable laws. If requested by LICENSEE, LICENSORS agree to provide reasonable assistance applying for such waiver.

3.4 All rights granted by LICENSORS to LICENSEE are further subject to the paid-up, non-exclusive, irrevocable licenses reserved by HHMI to make and use the Invention for its research purposes. Such licenses reserved by HHMI specified in Section 1.8 of this Agreement do not include the right to sublicense others. Moreover, the licenses granted to LICENSEE hereunder are also subject to the National Institutes of Health "Principles and Guidelines for Recipients of NIH Research Grants and Contracts on Obtaining and Disseminating Biomedical Research Resources" set forth in 64 F.R. 72090 (Dec. 23, 1999) and HHMI's statement policy of research tools (see www.hhmi.org/about/ogc/policies.html).

4. RESERVATION OF RIGHTS; FREEDOM TO PUBLISH

4.1 LICENSEE acknowledges that REGENTS and UNIVERSITY OF VIENNA are dedicated to free scholarly exchange and to public dissemination of the results of its scholarly activities. Nothing in this Agreement will be deemed to limit the right of REGENTS and UNIVERSITY OF VIENNA, its faculty, employees and students (collectively, "Personnel") to publish, disseminate or otherwise

disclose any and all information resulting from research performed by REGENTS and UNIVERSITY OF VIENNA and/or Personnel relating to any Invention, or to make and use any Invention. Licensed Product, Licensed Service, Licensed Method or Material and associated technology and allow other educational and non-profit institutions to do so for educational and research purposes.

4.2 REGENTS further reserves the right to license Licensed Patent Rights to any third parties solely for Humanitarian Purposes. Such licenses for Humanitarian Purposes shall (i) expressly exclude the right of the third party licensee to export or sell the Licensed Products from an EDC into a market outside of the EDC where LICENSEE has Introduced or will introduce a Licensed Product and where Licensed Patent Rights exist (such markets, the "LICENSEE Markets") and (ii) require the third party licensee to create and maintain distinctive trade dress and trademarks that clearly distinguish third party Licensed Products and Licensed Services from LICENSEE'S Licensed Products and Licensed Services, (iii) require such third party licensee's sale of Licensed Products and Licensed Services in such EDCs at or below cost For avoidance of doubt, such third party licensee may be permitted to export Licensed Products from the EDC of origin to other EDCs and all other countries mutually agreed to by REGENTS and LICENSEE. Notwithstanding the foregoing:

4.2.1 prior to issuance of any such license to licensed Patent Rights to a third party, the REGENTS will notify LICENSEE of its intention to grant such license so that LICENSEE may have the opportunity to fill the anticipated market need itself and/or to engage in discussions for a sublicense with such third party in accordance with the procedures set forth in Section 5.3 herein; and

4.2.2 in the event any Licensed Product sold in any EDC by any such third party according to the provisions of Section 4.2.1 is exported, re-sold or otherwise introduced in any LICENSEE Markets, LICENSEE will provide the REGENTS with written notification thereof, and if such exportation, re-sale or introduction does not cease within ninety (90) days after the date of such notice, then an amount equal to the retail price of Licensed Product so exported, re-sold or introduced to such LICENSEE Market shall be deducted from any royalties due to REGENTS hereunder.

5. ROYALTIES, EQUITY AND FEES

5.1 In consideration of the license granted under Section 3.1 of this Agreement, LICENSEE shall pay to REGENTS the following payments:

(a) [***] annual maintenance fee beginning on the First Anniversary Date and ending on the first Anniversary Date to occur after the first sale of a Licensed Product or Licensed Service; and

(b) [***] at the close of the First Qualified Round;

which payments shall be non-creditable and non-refundable.

5.1.1 LICENSEE will pay to REGENTS earned royalties for Licensed Services, Licensed Products, and Licensed Methods sold by LICENSEE and its Affiliates at the rate (a "Set Royalty") of:

(a) [***] of the Net Sales of Licensed Products, Licensed Services, and Licensed Methods until such time as the Net Sales of Licensed Products, Licensed Services, and Licensed Methods exceeds [***]in each Annual Period, and [***] thereafter in such Annual Period in the [***];

(b) [***] of the Net Sales of Licensed Products, Licensed Services, and Licensed Methods until such time as the Net Sales of Licensed Products, Licensed Services, and Licensed Methods exceeds [***] in each Annual Period, and [***] thereafter in such Annual Period in the [***];

(c) [***] of the Net Sales of Licensed Products, Licensed Services, and Licensed Methods in [***] of the Licensed Field of Use.

5.1.2 In the event that LICENSEE or its Affiliates reasonably determine It necessary to obtain a license from any third party in order to avoid infringing such third party's patent(s) by use of the Licensed Patent Rights to make, use or sell the Licensed Products or Licensed Methods, or to provide Licensed Services in a particular territory or jurisdiction, and the total royalty due REGENTS and all third party licensors exceeds [***] then LICENSEE shall be entitled to set off as a reimbursed credit against the royalty payable to REGENTS pursuant to this Section 5.1:2, [***] of the amount payable to such third parties under such third party licenses in the same reporting period as covered by the REGENTS royalty payment; provided, however, that in no event shall the royalty payable to REGENTS be less than [***] of the amount otherwise due to REGENTS for such reporting period. For clarification, a reduction in earned royalties shall only apply to sales in those territories or jurisdictions in which a royalty to a third-party is also due.

5.1.3 Notwithstanding anything in this Agreement to the contrary, earned royalties will not be collected or paid hereunder on LICENSEE's use of Licensed Patent Rights in EDCs or on sales of Licensed Products or Licensed Services in EDCs, provided that LICENSEE will either give Licensed Products or Licensed Services away for free in EDCs or will sell Licensed Products or Licensed Services on a no profit and no loss basis.

5.1.4 LICENSEE shall pay REGENTS the following milestone payments:

[***]

5.1.5 Royalty payments hereunder shall be suspended if all Licensed Patents covering a Licensed Product or Licensed Service have a priority claim greater than [***] years before the sale of such Licensed Product or Licensed Service and no such claims have issued; provided however, that if such Licensed Patents subsequently issue, LICENSEE will [***].

5.1.6 If a Licensed Product is used in the performance of any Licensed Services, only one royalty shall he due on the Net Sales calculated based on amounts received for the performance of the Licensed Services. In the event that more than one Valid Claim within the Licensed Patent Rights is applicable to any Licensed Product and/or Licensed Service subject to royalties under this Article 5, then only one royalty shall be paid to REGENTS in respect of such Licensed Product and/or Licensed Service. No royalty shall be payable under this Article 5 with respect to Licensed Products or Licensed Services for use in research and/or development (including clinical trials) or as samples for use in marketing activities.

5.1.7 To the extent required by law, no royalties will be collected or paid hereunder on sales to, or for use by, the United States Government. LICENSEE will reduce the amount charged for such sales by art amount equal to the royalty otherwise due REGENTS as provided herein.

5.2 Beginning on the [***]Anniversary Date after the first sale of a Licensed Product or Licensed Service, LICENSEE will pay REGENTS a minimum annual royalty of [***]. The minimum annual royalty will he credited against the royalty due and owing for the Annual Period in which the minimum payment is made.

5.3 In consideration of the right to sublicense third parties granted under Section 3.2 of this Agreement, LICENSEE will make the following payments to REGENTS:

5.3.1 50% of any and all gross revenues, fees, minimum royalties (excluding minimum royalties that are offset against earned royalties on Net Sales) or other payments and consideration, including any debt and/or equity securities or instruments, or any part thereof, received by LICENSEE from any Sublicensee directly related to the grant of any sublicense by LICENSEE pursuant to Section 5.1 if LICENSEE sublicenses only Licensed Patent Rights; or

5.3.2 [***] of any and all other gross revenues, fees, minimum royalties (excluding minimum royalties that are offset against earned royalties on Net Sales) or other payments and consideration, including any debt and/or equity securities or instruments, or any part thereof, received by LICENSEE from any Sublicensee directly related to the grant of any sublicense by LICENSEE pursuant to Section 5.1, if LICENSEE sublicenses intellectual property rights that include both Licensed Patent Rights and rights to issued patents or patent applications owned or controlled by LICENSEE.

5.3.3 Notwithstanding the foregoing, REGENTS will not be entitled to any amounts under Sections 5.3.1 or 5.3.2 above, with respect to amounts received by LICENSEE directly from any Sublicensee that (i) constitute bona fide research and development funding related to potential Licensed Products or Licensed Services; (ii) are received in consideration of the sale of equity or debt securities to a Sublicensee; (iii) are royalty payments received by LICENSEE related to Net Sales for which there is a royalty payment obligation pursuant to Section 5.1.2 above; (iv) are reimbursement for LICENSEE's actual out-of-pocket expenses incurred in prosecution and maintenance of the Licensed Patents; (v) are bona fide payments for goods or services provided by Licensee; or (vi) are charged after the expiration date of the last to expire Valid Claim.

5.3.4 With respect to revenues obtained by LICENSEE in foreign countries, LICENSEE will make royalty payments to REGENTS in United States dollars. Royalty payments for transactions outside the United States will first be determined in the currency of the country in which they are earned, and then converted to United States dollars using the buying rates of exchange quoted by Wells Fargo Bank, N.A. (or its successor) in Berkeley, California for the last business day of the calendar quarter in which the royalties were earned.

5.3.5 If REGENTS, at any time after the [***] Anniversary Date becomes aware that the Invention is useful for an application in the Licensed Field of Use, but for which Licensed Products or Licensed Services have not been developed or are not then currently under development by LICENSEE or its Sublicensees, then REGENTS may give written notice to LICENSEE identifying such application. LICENSEE will have [***] to give REGENTS written notice stating whether LICENSEE intends to develop Licensed Products or Licensed Services for such application within a commercially reasonable time period.

If LICENSEE elects to develop and commercialize the proposed Licensed Products or Licensed Services for the new application, LICENSEE shall submit a commercialization plan with performance milestones and shall submit progress reports to REGENTS pursuant to Section 7.3.

If LICENSEE elects not to develop and commercialize the proposed Licensed Products or Licensed Services for use in the new application, and such proposed Licensed Products

or Licensed Services are not directly competitive with any Licensed Products or Licensed Services then offered for sale or in bona fide development by LICENSEE or its Sublicensees, REGENTS may seek third party(ies) to develop and commercialize the proposed Licensed Products for the new application. If REGENTS is successful in finding a third party, it will refer such third party to LICENSEE and LICENSEE shall use good faith efforts to enter into a sublicense with such third party. If LICENSEE has not granted a sublicense to the third party despite such good faith efforts to negotiate with LICENSEE within [***] after receiving such request, then within [***] after such refusal LICENSEE shall submit to REGENTS a report specifying the final license terms proposed by the third party and a written justification for LICENSEE's refusal to grant the proposed sublicense. If REGENTS, at its sole discretion, determines that the terms of the sublicense proposed by the third party are reasonable under the totality of the circumstances, taking into account LICENSEE's Licensed Products in development, then REGENTS will have the right to grant to the third party a license to make, have made, use, sell, offer for sale, distribute and import Licensed. Products for use in the new application at substantially the same terms most recently proposed to LICENSEE by that the third party and providing fees and/or royalty rates that are at least equal to those paid by LICENSEE.

6. REPORTS AND PAYMENTS

6.1 Within 30 days from the end of each calendar quarter of each Annual Period of this Agreement, LICENSEE will submit to REGENTS a written report with respect to the preceding calendar quarter ("Payment Report") stating:

6.1.1 Net Sales by LICENSEE and any Affiliate during such quarter;

6.1.2 In the case of transfers of Licensed Products or Licensed Services by LICENSEE to an Affiliate for sale, rental, or lease of such Licensed Product or Licensed Service by the Affiliate to third parties, Net Sales by LICENSEE to the Affiliate anti Net Sales by the Affiliate to third parties during such quarter;

6.1.3 Amounts accruing to, and received by, LICENSEE from Sublicensees during such quarter;

6.1.4 Sublicensee's Net Sales duffing such quarter; and

6.1.5 A calculation under Article S of the amounts due to REGENTS, making reference to the application of each subsection thereof

6.2 Simultaneously with the submission of each Payment Report, LICENSEE will make payments to REGENTS of the amounts due for the calendar quarter covered by the Payment Report. Payment will be by check payable to "The Regents of the University of California" and delivered to the address shown in Article 20 (Notices).

6.3 The license maintenance fees minimum annual royalty will be paid to REGENTS on or before the applicable Anniversary Date, in accordance with Sections 5.1(a) and 5.2, respectively.

6.4 REGENTS and UNIVERSITY OF VIENNA each acknowledge and agree that (i) the payment and reporting obligations expressly set forth in this Agreement represent the total consideration payable by LICENSEE to LICENSORS under this Agreement, and (ii) REGENTS will receive all payments owed by LICENSEE under this Agreement on behalf of LICENSORS. REGENTS will he solely responsible for allocating payments from LICENSEE between REGENTS and UNIVERSITY OF VIENNA, and for enforcing LICENSEE'S reporting and payment obligations under this Article 6, pursuant to a separate agreement between them, and the payment by LICENSEE to REGENTS of an amount required to be paid under this Agreement shall satisfy all obligations of LICENSEE with respect to such payment.

LICENSEE will maintain at its principal office usual books of account and records showing its actions under this Agreement. Upon reasonable notice, such books and records will be open to inspection and copying, during usual hours, by an independent accountant to whom LICENSEE has no reasonable objection, for [***] after the calendar quarter to which they pertain, for purposes of verifying the accuracy of the amounts paid by LICENSEE under this Agreement. In the event such review reveals that any payment to REGENTS was understated by more than 10%, LICENSEE will pay, within ten (10) days after demand by LICENSORS, the reasonable cost of such review.

7. DILIGENCE

7.1 LICENSEE will use commercially reasonable and diligent efforts to research, develop and market Licensed Products and or Licensed Services for commercial sale and distribution throughout the Licensed Territory, and to such end, such efforts will include the following:

7.1.1 Within [***] after the Effective Date of this Agreement, LICENSEE will provide an updated financing and business plan for the research, development and marketing of Licensed Products and Licensed Services reasonably acceptable to REGENTS.

7.2 In addition, LICENSEE, an Affiliate of LICENSEE or a Sublicensee will meet the following milestones:

[***]

7.3 No less than [***] after the Effective Date of this Agreement, LICENSEE will submit to REGENTS a written report on progress made toward the diligence objectives set forth above, including updated business plans, together with the amount of research and development monies related to Licensed Products and/or Licensed Services and expended during that time period.

7.4 Without limiting the foregoing, in the event that LICENSEE Is unable to complete the milestones and diligence requirements set forth in Paragraphs 7.1 and 7.2, despite using its diligent efforts to do so, due to delays which are out of the reasonable control of LICENSEE (e.g., changes to the regulatory pathways or other regulatory delays, problems with clinical trial protocols or designs or adverse events and the like), LICENSORS agree to grant reasonable extensions of the timeline for the applicable diligence milestones. Subject to the foregoing, failure by LICENSEE to achieve any of the diligence obligations under this Article 7 will result in LICENSORS in their sole discretion having the option of terminating all of the exclusive licenses granted under Article 3, in accordance with Article 18 of this Agreement, or converting any or all of such exclusive licenses to nonexclusive licenses; provided that prior to any such termination, LICENSORS, at LICENSEE’s request, shall negotiate in good faith for at least [***] days regarding amendment of this Agreement and maintaining the exclusive licenses granted to LICENSEE.

8. PATENT PROSECUTION AND MAINTENANCE

[***]

9. INFRINGEMENT

9.1 In the event that LICENSEE learns of the substantial infringement of any Licensed Patent Rights under this Agreement, LICENSEE will promptly provide LICENSORS with notice and reasonable evidence of such infringement (“Infringement Notice”). During the period and in a jurisdiction where LICENSEE has exclusive rights under this Agreement, no party will notify a third party,

including the infringer, of the infringement without first obtaining consent of the other parties, which consent will not be unreasonably withheld. All parties will use diligent efforts, in cooperation with each other, to terminate such infringement without litigation.

9.2 If the infringing activity of potential commercial significance has not been abated within [***] following the effective date of the Infringement Notice, LICENSEE may institute suit for patent infringement against the infringer. LICENSEE may not join REGENTS or UNIVERSITY OF VIENNA in a suit initiated by LICENSEE without LICENSORS' respective prior written consent. If, in a suit initiated by LICENSEE, either or both LICENSORS are involuntarily joined other than by LICENSEE, LICENSEE will pay the costs incurred by LICENSORS arising out of such suit, including but not limited to, any legal fees of counsel that LICENSORS select and retain to represent them in the suit.

If, within one hundred and eighty (180) days following the effective date of the Infringement Notice, the infringing activity of potential commercial significance has not been abated and if LICENSEE has not brought suit against the infringer, LICENSORS may institute suit for patent infringement against the infringer. If LICENSORS institute such suit, LICENSEE may not join such suit without LICENSORS' consent and may not thereafter commence suit against the infringer for the acts of infringement that are the subject of LICENSOR'S suit or any judgment rendered in that suit.

9.3 Any recovery or settlement received in connection with such suit will belong to the party that brings the suit. If such suit is brought jointly by LICENSORS and LICENSEE and the parties all participated, any recovery or settlement will be allocated in the following order: a) equally to cover any unreimbursed litigation costs each incurred, and b) any remaining amount shared jointly by the parties in proportion to the share of expenses paid by each party, but in no event will the LICENSORS' share be less than [***] of such remaining amount to each LICENSOR if either one is or both LICENSORS are a party.

9.4 All parties will cooperate with each other in litigation instituted hereunder but at the expense of the party on account of whom suit is brought. Such litigation will be controlled by the party bringing the action, except that LICENSORS may be represented by counsel of its choice in any suit brought by LICENSEE.

9.5 Any agreement made by LICENSEE for the purposes of settling litigation or other dispute shall comply with the requirements of Section 3.2 of this Agreement.

10. LIMITED WARRANTY

10.1 LICENSORS each represent and warrant to LICENSEE that they have the lawful right to grant this license and to the best knowledge of the UC Berkeley Office of Technology Licensing (with respect to REGENTS) and to the best knowledge of the University of Vienna Technology Transfer Office (with respect to UNIVERSITY OF VIENNA) as of the Effective Date LICENSORS have not previously granted and will not grant during the term of this Agreement, any right or license that conflicts with the license granted and LICENSORS have not previously granted and will not grant during the term of this Agreement, any right or license that conflicts with the license granted herein.

10.2 THIS LICENSE AND THE ASSOCIATED INVENTION ARE PROVIDED WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED EXCEPT AS EXPRESSLY PROVIDED HEREIN. LICENSORS MAKE NO REPRESENTATION OR WARRANTY THAT THE INVENTION, REGENTS' PATENT RIGHTS, LICENSED PRODUCTS. LICENSED SERVICES OR LICENSED METHOD WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT.

10.3 IN NO EVENT WILL ANY PARTY TO THIS AGREEMENT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM EXERCISE OF THIS LICENSE OR THE USE OF THE INVENTION, LICENSED PATENT RIGHTS, LICENSED METHOD, LICENSED SERVICES OR LICENSED PRODUCTS.

10.4 Nothing in this Agreement is or will be construed as:

10.4.1 a warranty or representation by LICENSORS as to the validity, enforceability or scope of any Licensed Patent Rights; or

10.4.2 a warranty or representation that anything made, used, or sold under any license granted in this Agreement is or will be free from infringement of patents of third parties; or

10.4.3 an obligation to bring or prosecute actions or suits against third parties for patent infringement, except as provided in Article 9; or

10.4.4 conferring by implication, estoppel, or otherwise any license or rights under any patents of LICENSORS other than LICENSED PATENT RIGHTS as defined herein, regardless of whether such patents are dominant or subordinate to Licensed Patent Rights; or

10.4.5 an obligation to furnish any know-how not provided in the patents and patent applications under Licensed Patent Rights,

11. LIMITED LIABILITY

EXCEPT AS SET FORTH IN ARTICLE 12 (INDEMNIFICATION) NO PARTY TO THIS AGREEMENT WILL BE LIABLE FOR ANY LOST PROFITS, COSTS OF PROCURING SUBSTITUTE GOODS OR SERVICES, LOST BUSINESS, ENHANCED DAMAGES FOR INTELLECTUAL PROPERTY INFRINGEMENT, OR FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SPECIAL DAMAGES SUFFERED BY THE OTHER PARTY ARISING OUT OF OR RELATED TO THIS AGREEMENT FOR ALL CAUSES OF ACTION OF ANY KIND (INCLUDING TORT, CONTRACT, NEGLIGENCE, STRICT LIABILITY AND BREACH OF WARRANTY) EVEN IF THE FIRST PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

12. INDEMNITY AND INSURANCE

12.1 LICENSEE will, and will require its Affiliates and Sublicensees to indemnify, hold harmless, and defend LICENSORS, the sponsors of the research that led to the Invention, and the inventors of any invention claimed in patents or patent applications under Licensed Patent Rights (including the Licensed Products, Licensed Services, and Licensed Methods contemplated thereunder) and their employers, and the officers, employees, and agents of any of the foregoing (collectively, “LICENSORS Indemnitee”, against any and all losses, damages, costs, fees, and expenses resulting from any claims or suits brought by any third party arising out of, the exercise of this license or any sublicense granted by LICENSEE hereunder; except to the extent such losses, damages, costs fees and expenses result from LICENSORS’ gross negligence or willful misconduct or any breach of its representations and warranties. This indemnification will include, but will not be limited to, any product liability. If REGENTS or UNIVERSITY OF VIENNA„ in their sole discretion, believe that there will be a conflict of interest or they will not otherwise he adequately represented by counsel chosen by LICENSEE to defend them in accordance with this Section 12.1, then REGENTS or, THE UNIVERSITY OF VIENNA may retain counsel of their choice to represent them at their own expense.

HHMI and its trustees, officers, employees, and agents (collectively, “HHMI Indemnitees”) will be indemnified, defended by counsel acceptable to HIM and held harmless by LICENSEE, its

Affiliates and its Sublicensees from and against any liability, cost, expense, damage, deficiency, loss, or obligation of any kind or nature (including, without limitation, reasonable attorneys' fees and other costs and expenses of defense) based upon, arising out of, or otherwise relating to any third-party claim (collectively, "Claims") based upon, arising out of, or otherwise relating to this Agreement, including without limitation any cause of action relating to product liability. The previous sentence will not apply to any Claim that is determined with finality by a court of competent jurisdiction to result solely from the gross negligence or willful misconduct of an HHMI Indemnitee. For clarity, acts conducted under the retained rights and licenses set forth in Article 4 above are not subject to this indemnification obligation of LICENSEE or any Sublicensee. If HEIM', in its sole discretion, believes that there will be a conflict of interest or it will not otherwise be adequately represented by counsel chosen by LICENSEE to defend the HHMI Indemnitees in accordance with this Section 12.1, then HHMI may retain counsel of its choice to represent the HHM1.

12.2 LICENSEE, at its sole cost and expense, will insure its activities in connection with any work performed hereunder and will obtain, keep in force, and maintain the following insurance:

12.2.1 [***]

Each Occurrence	[***]
Products/Completed Operations Aggregate	[***]
Personal and Advertising Injury	[***]
General Aggregate	[***]

[***]

Each Occurrence	[***]
Products/Completed Operations Aggregate	[***]
Personal and Advertising Injury	[***]
General Aggregate	[***]

If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination or expiration of this Agreement. The insurance shall have a retroactive date of placement prior to or coinciding with the Effective Date of this Agreement; and

12.2.2 Worker's Compensation as legally required in the jurisdiction in which LICENSEE is doing business.

12.2.3 The coverage limits referred to in Sections 12.2.1 and 12.2.2 above will not in any way limit the liability of LICENSEE under this Article. Upon the execution of this Agreement LICENSEE will furnish REGENTS with certificates of insurance evidencing compliance with all requirements. Such certificates will (i) provide for thirty (30) days' (10 days for non-payment of premium) advance written notice to REGENTS of any cancellation of insurance coverages; LICENSEE will promptly notify REGENTS of any material modification of the insurance coverage, (ii) indicate that REGENTS and HHMI have been endorsed as additional insureds under the coverage described in Section 12.2.1 above, and (iii) include a provision that the coverage will be primary and will not participate with, nor will be excess over, any valid and collectable insurance or program of self-insurance maintained by REGENTS or HHMI.

12.3 LICENSORS will (i) promptly notify LICENSEE in writing of any claim or suit brought against either LICENSOR for which either or both LICENSORS intends to invoke the provisions of this Article 12, (ii) provide LICENSEE with the sole right to control the defense and settlement thereof provided that LICENSEE may not admit any fault or wrongdoing on behalf of any LICENSOR, (iii) obtain LICENSEE'S written consent prior to making any admission or agreeing to any

settlement of any such claim and (iv) provide reasonable assistance and cooperation in connection with the defense and settlement of any such claim. LICENSEE will keep LICENSORS informed of its defense of any claims pursuant to this Article 12.

In the case of an HHMI Indemnitee, notice will be given promptly following actual receipt of written notice thereof by an officer or attorney of HHMI. Notwithstanding the foregoing, the delay or failure of an HHMI Indemnitee to give prompt notice to LICENSEE of any Claim will not affect the rights of such HHMI Indemnitee unless, and then only to the extent that, such delay or failure is prejudicial to or otherwise adversely affects LICENSEE.

12.4 LICENSEE will not settle any claim or Claim against LICENSORS Indemnitee or HHMI Indemnitees without LICENSORS Indemnitee or HHMI Indemnitees' written consent, where (i) such settlement would include any admission of liability or admission of wrong doing on the part of LICENSORS Indemnitee or HHMI Indemnitees, (ii) such settlement would impose any restriction of REGENTS or HHMI Indemnitees' conduct of any of its or their activities, or (iii) such settlement would not include an unconditional release of LICENSORS Indemnitee or HHMI Indemnitees from all liability for claims that are the subject matter of the settled claim or Claim.

13. JOINT LICENSORS

It is understood and agreed that any performance due to the LICENSORS by LICENSEE under this Agreement, including without limitation the payment of financial consideration owed to LICENSORS hereunder, shall be deemed rendered to REGENTS and UNIVERSITY OF VIENNA to the extent such performance by LICENSEE is rendered to REGENTS or UNIVERSITY OF VIENNA. LICENSEE agrees however, that it may owe separate duties to REGENTS and UNIVERSITY OF VIENNA, and REGENTS and UNIVERSITY OF VIENNA each have the right to act separately under this Agreement, including but not limited to the independent right to terminate this Agreement solely on their own behalf or enforce obligations specifically owed by LICENSEE to each individual LICENSOR.

14. USE OF NAME AND TRADEMARKS

Nothing contained in this Agreement will be construed as conferring any right to use in advertising, publicity or other promotional activities any name, trademark, trade name, or other designation of either party hereto by the other (including any contraction, abbreviation, or simulation of any of the foregoing). Unless required by law or consented to in writing by REGENTS, the use by LICENSEE of the name "The Regents of the University of California" or the name of any University of California campus in advertising, publicity or other promotional activities is expressly prohibited.

15. COMPLIANCE WITH LAWS

LICENSEE will comply with all applicable international, national, state, regional, and local laws and regulations in performing its obligations hereunder and in its use, manufacture, sale or import of the Licensed Products, Licensed Services, or practice of the Licensed Methods. LICENSEE understands that REGENTS is subject to United States laws and regulations (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979), controlling the export of technical data, computer software, laboratory prototypes and other commodities, and REGENTS' obligations under this Agreement are contingent on compliance with such laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by LICENSEE that LICENSEE will not export such technical data and/or commodities to certain foreign countries without prior approval of such agency. REGENTS neither represents that a license will not be required nor that, if required, it will be issued,

16. GOVERNMENT APPROVAL OR REGISTRATION

If this Agreement or any associated transaction is required by the law of any nation to be either approved or registered with any governmental agency, LICENSEE will assume all legal obligations to do so. LICENSEE will notify REGENTS if it becomes aware that this Agreement is subject to a United States or foreign government reporting or approval requirement. LICENSEE will make all necessary filings and pay all costs including fees, penalties, and all other out-of-pocket costs associated with such reporting or approval process.

17. ASSIGNMENT

[***]

18. TERM OF THE AGREEMENT

18.1 Unless otherwise terminated by the operation of law or by acts of the parties in accordance with the terms of this Agreement, this Agreement will be in force from the Effective Date and will remain in effect for the life of the last-to-expire patent or last-to-be-abandoned patent application licensed under this Agreement, whichever is later.

18.2 Any termination of this Agreement shall not affect the rights and obligations set forth in Articles/Sections 2, 3.2, except for the right to grant sublicenses, 6.4, 10, 12.1, 12.3, 12.4, 14, 18, 19, 20, 21, 23, 26.

18.3 If LICENSEE should materially violate or fail to perform any material term of this Agreement, then LICENSORS may give written notice of such default ("Notice of Default") to LICENSEE. If LICENSEE should fail to repair such default within [***] of the effective date of such notice, LICENSORS will have the right to terminate this Agreement and the licenses herein by a second written notice ("Notice of Termination") to LICENSEE. If a Notice of Termination is sent to LICENSEE, this Agreement will automatically terminate on the effective date of such notice. These notices will be subject to Article 20 (Notices). Notwithstanding the foregoing, in the event LICENSEE disputes any alleged material breach in writing within [***] of receiving the applicable Notice of Default, REGENTS shall not have the right to terminate this Agreement unless and until it was determined pursuant to this Section 18.3 that such material breach has occurred and LICENSEE fails to cure such breach within [***] after such determination. If the parties are unable to resolve such dispute with respect to whether a material breach has occurred, LICENSEE shall have the right to initiate a binding arbitration proceeding to resolve such dispute. Any arbitration under this Section 18.3 shall be held in San Francisco, California under the then-current rules of the judicial Arbitration and Mediation Services (JAMS) by one (1) arbitrator appointed in accordance with such rules. LICENSEE will pay costs of arbitration under this Section 18.3. The arbitrator's decision with respect to whether the alleged material breach has occurred shall be binding and final.

18.4 LICENSEE will have the right at any time to terminate this Agreement in whole or as to any portion of Licensed Patent Rights by giving notice in writing to REGENTS. Such notice of termination will be subject to Article 20 (Notices) and termination of this Agreement will be effective [***] after the effective date of such notice.

18.5 Any termination of this Agreement will not relieve LICENSEE of its obligation to pay any monies due or owing at the time of such termination, will not rescind anything done by LICENSEE or any payments made to REGENTS and will not impair any accrued rights of LICENSORS, and will not relieve any obligations, of either party to the other party, established prior to termination.

19. DISPOSITION OF LICENSED PRODUCTS UPON TERMINATION

Upon termination of this Agreement, for a period of one hundred twenty (120) days after the dare of termination LICENSEE may complete and sell any partially made Licensed Products and continue to render any previously commenced Licensed Services, and continue the practice of Licensed Method only to the extent necessary to do so; provided, however, that all such sales will be subject to the terms of this Agreement including, but not limited to, the payment of royalties at the rate and at the time provided herein and the rendering of reports thereon.

20. NOTICES

All notices under this Agreement will be deemed to have been fully given and effective when done in writing and delivered in person, or mailed by registered or certified U.S. mail, or deposited with a carrier service requiring signature by recipient, and addressed to the other Party as follows:

To REGENTS: Office of Technology Licensing
2150 Shattuck Avenue, Suite 510
Berkeley, CA 94720-1620
Attn.; Director (UC Case No. B10-028)

To UNIVERSITY OF VIENNA:
Research Services and Career Development
University of Vienna Berggasse 7,
2nd floor
1090 Vienna, Austria

To LICENSEE: Caribou Biosciences, Inc.
QB3 Garage, MS#3220
Stanley Hall, Rm. 130
Berkeley, CA 94720
Attn.: President

cc: [***]
[***]
[***]
[***]
[***]

Any party may change its address upon written notice to the other parties.

21. LATE PAYMENTS

if monies owed to REGENTS under this Agreement are not received by REGENTS when due, LICENSEE will pay to REGENTS interest charges at a rate of [***] per annum. Such interest will be calculated from the date payment was due until actually received by REGENTS. Such accrual of interest will be in addition to, and not in lieu of, enforcement of any other rights of REGENTS related to such late payment. Acceptance of any late payment will not constitute a waiver under Article 22 (Waiver) of this Agreement.

22. WAIVER

The failure of any party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement will not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party. None of the terms and conditions of this Agreement can be waived except by the written consent of the party waiving compliance.

23. CONFIDENTIALITY

23.1 Reserved.

23.2 Reserved.

23.3 LICENSORS will be free to release to the inventors and senior administrators employed by LICENSORS the terms and conditions of this Agreement upon their request. If such release is made, LICENSORS will inform their respective employees of the confidentiality obligations set forth above and will request that they do not disclose such terms and conditions to others. Should a third party inquire whether a license to Licensed Patent Rights is available, LICENSORS may disclose the existence of this Agreement and the extent of the grant in Articles 3 and 4 to such third party, but will not disclose the name of LICENSEE unless LICENSEE has already made such disclosure publicly, except where REGENTS is required to release information under either the California Public Records Act or other applicable law, provided REGENTS gives prior written notice to LICENSEE of such disclosure.

23.4 LICENSEE and LICENSORS agree to destroy or return to the disclosing party proprietary information received from the other in its possession within fifteen (15) days following the effective date of termination of this Agreement. However, each party may retain one copy of proprietary information of the other solely for archival purposes in non-working files for the sole purpose of verifying the ownership of the proprietary information, provided such proprietary information will be subject to the confidentiality provisions set forth in Section 23. LICENSEE and LICENSORS agree to provide each other, within thirty (30) days following termination of this Agreement, with a written notice that proprietary information has been returned or destroyed.

24. FORCE MAJEURE

Except for LICENSEE'S obligation to make any payments to REGENTS hereunder, the parties to this Agreement shall be excused from any performance required hereunder if such performance is rendered impossible or unfeasible due to any catastrophes or other major events beyond their reasonable control, including, without limitation, war, riot, and insurrection; laws, proclamations, edicts, ordinances, or regulations; strikes, lockouts, or other serious labor disputes; and floods, fires, explosions, or other natural disasters. When such events have abated, the parties' respective obligations hereunder will resume,

25. SEVERABILITY

The provisions of this Agreement are severable, and in the event that any provision of this Agreement will he determined to be invalid or unenforceable under any controlling body of law, such invalidity or enforceability will not in any way affect the validity or enforceability of the remaining provisions hereof.

26. APPLICABLE LAW; VENUE; ATTORNEY'S FEES

THIS AGREEMENT WILL BE CONSTRUED, INTERPRETED, AND APPLIED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, excluding any choice of law rules that would direct the application of the laws of another jurisdiction, but the scope and validity of any patent or patent application under Licensed Patent Rights will be determined by the applicable law of the country of such patent or patent application. Any claim or dispute arising between the parties regarding the terms or performance of this Agreement will be adjucated in the Courts of California, and all parties consent to the exclusive jurisdiction of such Courts. Venue will lie only in San Francisco County, California or the U.S. District Court for the Northern District of California.

27, HHMI THIRD-PARTY BENEFICIARY

HHMI is not a party to this Agreement and has no liability to any licensee, sublicensee, or user of anything covered by this Agreement, but HHMI is an intended third party beneficiary of this Agreement and certain of its provisions are for the benefit of HHMI and are enforceable by HHMI in its own name.

27. SCOPE OF AGREEMENT

This Agreement (except for the Confidentiality Agreement dated April 26, 2012 and extension thereof, which will continue to the extent it is not inconsistent with this Agreement) incorporates the entire agreement between the parties with respect to the subject matter hereof, supercedes all previous agreements between LICENSORS and LICENSEE, and this Agreement may be altered or modified only by written amendment duly executed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers or representatives.

THE REGENTS OF THE
UNIVERSITY OF CALIFORNIA

By /s/ Michael Katz
Michael Katz
Executive Director
Intellectual Property and
Industry Research Alliances

Date March 28, 2013

CARIBOU BIOSCIENCES, INC.

By /s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President

Date March 28, 2013

THE UNIVERSITY OF VIENNA

By /s/ Susanne Weigelin-Schwiedrzik
Susanne Weigelin-Schwiedrzik
Vice-Rector for Research and Career Development

Date April 16, 2013

APPENDIX 1

[***]

APPENDIX 2

Neglected Diseases

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.22

AMENDMENT

TO THE

EXCLUSIVE LICENSE

BETWEEN

CARIBOU BIOSCIENCES, INC.

AND

THE UNIVERSITY OF VIENNA

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

METHODS AND COMPOSITIONS FOR RNA-DIRECTED TARGET DNA MODIFICATION

AND FOR RNA-DIRECTED MODULATION OF TRANSCRIPTION

Amendment Agreement

Caribou Biosciences , Inc. (“Caribou”), the University of Vienna (“University of Vienna”) and the Regents of the University of California (“Regents”) do hereby agree to amend the EXCLUSIVE LICENSE BETWEEN CARIBOU BIOSCIENCES, INC., THE UNIVERSITY OF VIENNA AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA relating to [***] (“Agreement”) in the respects shown below (“Amendment Agreement”):

1. Section 1.7 of the Agreement shall be deleted and replaced with the following:

1.7 HHMI assigned its rights in the Inventions to REGENTS [***] and accordingly, REGENTS has the authority to negotiate a license on behalf of UNIVERSITY OF VIENNA in the Invention and any patent rights claiming it. REGENTS have no authority to license Emmanuelle Charpentier’s interest or rights in the Inventions.

2. Article 17 of the Agreement shall be deleted and replaced with the following:

17. ASSIGNMENT

[***]

[signature page to follow]

IN WITNESS WHEREOF, the parties hereto executed this Amendment Agreement by their duly authorized officers or representatives.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: /s/ Michael Katz
Michael Katz
Executive Director
Intellectual Property and Industry Research Alliances

Date: April 9, 2013

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President

Date: April 17, 2013

THE UNIVERSITY OF VIENNA

By: /s/ Susanne Weigelin-Schwiedrzik
Susanne Weigelin-Schwiedrzik
Vice-Rector for Research and Career Development

DATE April 16, 2013

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.23

Confidential

Amendment No. 2 to Exclusive License Agreement for Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription

This Amendment No. 2 is made to the Exclusive License Agreement for Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription, dated April 16, 2013, as amended by an Amendment Agreement, dated April 17, 2013 (collectively, the "License Agreement"), by and among The Regents of the University of California, the University of Vienna, and Caribou Biosciences, Inc., and is effective March 14, 2019 (the ''Amendment Effective Date"). Caribou Biosciences, Inc. is referred to as "LICENSEE" and The Regents of the University of California ("REGENTS") and the University of Vienna are collectively referred to as "LICENSORS." Capitalized terms not defined herein shall have the meaning set forth in the License Agreement.

WHEREAS, LICENSEE and LICENSORS wish to amend the License Agreement, as set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valid consideration, the amount and sufficiency of which are hereby acknowledged, LICENSEE and LICENSORS agree as follows:

[***]

2. All other terms of the License Agreement, as clarified in the Memorandum of Understanding, dated as of the same date as the Amendment Effective Date, shall remain in full force and effect.

3. This Amendment No. 2 may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together will be deemed to be one and the same instrument. PDF or facsimile execution and delivery of this Amendment No. 2 by a party will constitute a legal, valid, and binding execution and delivery of this Amendment No. 2 by such party.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 2 as of the Amendment Effective Date by their duly authorized officers or representatives.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: /s/ Charles F. Robinson
Name: Charles F. Robinson
Title: General Counsel/Vice President-Legal Affairs

THE UNIVERSITY OF VIENNA

By: /s/ Jean Robert Tyran
Name: Jean Robert Tyran
Title: Vice-Rector for Research and International Affairs

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz, Ph.D.
Title: President & CEO

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.24

Confidential

Amendment No. 3 to Exclusive License Agreement for
Methods and Compositions for RNA-Directed Target DNA Modification
and for RNA-Directed Modulation of Transcription

This Amendment No. 3 is made to the Exclusive License Agreement for Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription, dated April 16, 2013, as amended by an Amendment Agreement, dated April 17, 2013, and as further amended by Amendment No. 2 to Exclusive License Agreement for Methods and Compositions for RNA-Directed Target DNA Modification and for RNA-Directed Modulation of Transcription, dated March 14, 2019, and as clarified in the Memorandum of Understanding, dated March 14, 2019 (collectively, the "License Agreement"), by and among The Regents of the University of California, the University of Vienna, and Caribou Biosciences, Inc., and is effective April 16, 2021 (the "Amendment Effective Date"). Caribou Biosciences, Inc. is referred to as "LICENSEE" and The Regents of the University of California ("REGENTS") and the University of Vienna are collectively referred to as "LICENSORS." Capitalized terms not defined herein shall have the meaning set forth in the License Agreement.

WHEREAS, LICENSEE and LICENSORS wish to further amend the License Agreement, as set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valid consideration, the amount and sufficiency of which are hereby acknowledged, LICENSEE and LICENSORS agree as follows:

1. Notwithstanding Section 7.2.3 of the License Agreement, LICENSEE and LICENSORS agree that LICENSEE, its Affiliate, or Sublicensee must [***]; provided, however, that, as consideration for this Amendment No. 3:

(a) LICENSEE shall pay REGENTS [***] on or before [***];

(b) The following additional milestones payments are hereby added to Section 5.1.4:

[***]

2. An additional milestone is hereby added to Section 7.2 of the License Agreement:

[***]

3. All other terms of the License Agreement shall remain in full force and effect.

4. This Amendment No. 3 may be executed in one or more counterparts, including by electronic signatures, each of which shall be deemed an original, and all of which together will be deemed to be one and the same instrument. PDF or facsimile execution and delivery of this Amendment No. 3 by a party will constitute a legal, valid, and binding execution and delivery of this Amendment No. 3 by such party.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 3 as of the Amendment Effective Date by their duly authorized officers or representatives.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: /s/ Terri Sale, J.D.

Name: Terri Sale, J.D.

Title: Associate Director—OTL

THE UNIVERSITY OF VIENNA

By: /s/ Ronald Maier

Name: Ronald Maier

Title: Vice-Rector for Digitalisation and Knowledge Transfer

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz, Ph.D.
Title: President & CEO

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.25

Confidential

Memorandum of Understanding

This Memorandum of Understanding ("MOU"), having an effective date of March 14, 2019 ("MOU Effective Date"), is by and among Caribou Biosciences, Inc., the University of Vienna, and The Regents of the University of California, and pertains to the Exclusive License Agreement, dated April 16, 2013, as amended by the Amendment Agreement and Amendment No. 2, of even date herewith, by and among the same parties (the "Cas9 Agreement"). Caribou Biosciences, Inc. is referred to as "LICENSEE" and the University of Vienna ("Vienna") and The Regents of the University of California ("REGENTS") are collectively referred to as "LICENSORS." Capitalized terms not defined in this MOU shall have the meaning set forth in the Cas9 Agreement.

WHEREAS, LICENSEE and LICENSORS wish to clarify and verify their mutual understanding of certain rights and obligations set forth in the Cas9 Agreement, as set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valid consideration, the amount and sufficiency of which are hereby acknowledged, LICENSEE and LICENSORS agree as follows:

1. For clarification, LICENSEE's right to grant sublicenses to the Licensed Patent Rights to third parties as set forth in Section 3.2 of the Cas9 Agreement includes the right to grant sublicenses to the Licensed Patent Rights through multiple tiers, subject to any future Sublicensee agreeing to abide by the provisions set forth in Exhibit A attached hereto ("Applicable Provisions") and subject to any future Sublicensee with the right to sublicense agreeing to include the Applicable Provisions in any future further sublicense.

2. Commencing on the MOU Effective Date, any and all sublicenses granted thereafter by LICENSEE shall include the Applicable Provisions, and LICENSEE covenants that it will require any such future Sublicensees with the right to grant further sublicenses to include the Applicable Provisions in any further sublicenses. If LICENSEE fails to comply with its obligations in the preceding sentence, then LICENSEE will have [***] to cure this deficiency, after which time (i) LICENSEE will terminate the sublicense that does not include the Applicable Provisions or from which the further sublicense that does not include the Applicable Provisions depends, and (ii) the Sublicense or further sublicense that does not include the Applicable Provisions will be invalid. In addition, if LICENSEE fails to comply with its obligations in the first sentence of this Paragraph 2, LICENSEE will indemnify LICENSORS and Howard Hughes Medical Institute ("HHMI") against any third-party claims caused by the absence of the Applicable Provisions in any future sublicenses and any future further sublicenses. The foregoing remedies are in addition to any other contractual or other legal and/or equitable remedies LICENSORS or HHMI may have arising out of the failure to include the Applicable Provisions in such future sublicenses or such future further sublicenses.

3. To the extent that LICENSEE has failed to include the Applicable Provisions in existing sublicenses granted prior to the MOU Effective Date or has failed to ensure that such provisions were incorporated into existing further sublicenses granted prior to the MOU Effective Date, LICENSEE will indemnify LICENSORS and HHMI against any third-party claims caused by the absence of the required Applicable Provisions in existing sublicenses and/or existing further sublicenses. Additionally, to the extent that LICENSORS or HHMI can demonstrate actual damages arising other than from third-party claims and directly caused by LICENSEE's failure to include Applicable Provisions in sublicenses or further sublicenses granted prior to the MOU Effective Date, LICENSEE will indemnify LICENSORS and HHMI in an amount up to [***] for each of REGENTS, Vienna, and HHMI. LICENSEE and LICENSORS agree to toll the applicable statute of limitation for such damages for a period of one (1) year solely for damages that could not reasonably have been discovered prior to the MOU Effective Date.

4. For clarification and notwithstanding Section 3.2(i) of the Cas9 Agreement, except as provided in Paragraphs 7 and 8 of this MOU, the required obligations set forth in Article 5 ("Royalties, Equity and Fees"), Article 6 ("Reports and Payments"), and Article 7 ("Diligence") of the Cas9 Agreement are applicable only to LICENSEE and not to any Sublicensee or further Sublicensee of a Sublicensee ("further Sublicensee"), except that:

    a. LICENSEE may discharge its obligations under Sections 5.1.4, 5.3.5, and/or 7.2, of the Cas9 Agreement through an Affiliate, a Sublicensee, or a further Sublicensee, provided that LICENSEE remains fully obligated for compliance with its obligations under those Sections and LICENSORS can exercise their contractual or other legal and equitable rights against LICENSEE if LICENSEE's obligations under those Sections are not fulfilled by LICENSEE, an Affiliate, a Sublicensee, or a further Sublicensee;

b. LICENSEE will pay the milestone payments set forth in Section 5.1.4 of the Cas9 Agreement when that milestone is first achieved, regardless of whether LICENSEE, an Affiliate, a Sublicensee, or a further Sublicensee, achieves that milestone. Only one payment is payable per milestone listed in Section 5.1.4; and

c. Section 5.1.9 and Section 5.1.3 of the Cas9 Agreement apply to LICENSEE and, to the extent applicable, to Sublicensees and further Sublicensees.

5. Commencing on the MOU Effective Date and notwithstanding Section 3.2(iii) of the Cas9 Agreement, LICENSEE shall provide LICENSORS with a copy of any and all future sublicense agreements to the Licensed Patent Rights entered into by LICENSEE and any and all future further sublicense agreements entered into by a Sublicensee with the right to further sublicense within [***] days after execution, subject to the following: (1) LICENSEE (and its Sublicensee or further Sublicensee) may redact those portions of a sublicense or further sublicense agreement that do not relate to payments or other obligations due to LICENSORS (e.g., such redactions may include research collaborations, licensing of other intellectual property, payments by LICENSEE to a Sublicensee, and the like); and (2) LICENSORS shall have the right to have LICENSORS' counsel review unredacted copies of any sublicenses or further sublicenses at either LICENSEE'S place of business or through online access; provided, however, that LICENSORS shall not have the right to copy, download, or print copies of the relevant unredacted sublicenses or further sublicenses and that LICENSORS agree to abide by the terms of any required confidentiality obligations under such sublicenses or further sublicenses. Furthermore, for any sublicense agreements to the Licensed Patent Rights that LICENSEE entered into prior to the MOU Effective Date that include the right to grant further sublicenses, LICENSEE will use good faith efforts to contact such Sublicensees and request copies of further sublicense agreements into which such Sublicensees have entered, as well as any future further sublicense agreements that such Sublicensee may enter into in the future if and when so executed, subject to conditions (1) and (2) above in this Paragraph 5.

6. LICENSEE represents and warrants that, as of the MOU Effective Date, LICENSEE has only entered into one sublicense agreement to the Licensed Patent Rights in the human Therapeutic Field and/or the human Diagnostics Field as it pertains to companion diagnostics for products in the human Therapeutic Field: the License Agreement, dated July 16, 2014, as amended, by and between LICENSEE and Intellia Therapeutics, Inc. ("Intellia"), the successor in interest to Intellia, LLC ("Intellia Agreement"), which is exclusive in a defined field of human therapeutics/companion diagnostics and which has been provided to LICENSORS with certain of the exhibits redacted and to REGENTS' outside counsel without redactions.

7. LICENSEE covenants that, in the event LICENSEE enters into future sublicense agreements to the Licensed Patent Rights in the human Therapeutic Field and/or the human Diagnostics Field as it pertains to companion diagnostics for products in the human Therapeutic Field, LICENSEE shall pay REGENTS the royalties on Net Sales amounts set forth in Sections 5.1.1(a) and (b), respectively, of the Cas9 Agreement for Net Sales of such future Sublicensees and future further Sublicensees, unless and until LICENSEE and LICENSORS enter into a subsequent written amendment to the Cas9 Agreement by which LICENSORS expressly agree to decrease the amount of such royalty obligations in the entire human Therapeutic Field and/or human Diagnostics Field as it pertains to companion diagnostics for products in the human Therapeutic Field (which, unless expressly set forth in a written amendment to the Cas9 Agreement and agreed to by Intellia, shall remain subject to the royalty adjustments expressly set forth in the Cas9 Agreement including, but not limited to, those set forth in Sections 2.18, 4.2, 5.1.2, 5.1.3, 5.1.5, 5.1.8, and 5.1.9).

8. [***]

9. [***]

10. [***]. LICENSEE will pay REGENTS 50% [***] of the determined fair value under Section 5.3.1 [***] of the Cas9 Agreement, [***].

11. Except as specified in this MOU and in Amendment No. 2 to the Cas9 Agreement, the terms of the Cas9 Agreement remain as stated therein and this MOU does not amend or modify those terms.

12. HHMI is not a party to this MOU and has no liability to LICENSEE or any Sublicensee, but MIMI is an intended third-party beneficiary of, and has the right to enforce in its own name, the indemnifications and other protections explicitly for HHMI set forth in Paragraphs 2 and 3 of this MOU. This Paragraph 12 shall survive any termination or expiration of this MOU.

13. This MOU may only be amended by a written instrument signed by an authorized representative or officer of each of LICENSEE and LICENSORS.

IN WITNESS WHEREOF, the parties have caused this Memorandum of Understanding to be executed by their duly authorized officers or representatives as of the MOU Effective Date set forth above.

LICENSEE:

Caribou Biosciences, Inc.

By: /s/ Barbara G. McClung
Name: Barbara G. McClung
Title: Chief Legal Officer

LICENSORS:

The University of Vienna

By: /s/ Jean-Robert Tyran
Name: Jean-Robert Tyran
Title: Vice-Rector
Date: March 14, 2019

The Regents of the University of California

By: /s/ Charles F. Robinson
Name: Charles F. Robinson
Title: General Counsel/Vice President – Legal Affairs
Date:

Exhibit A

Required Sublicense and Further Sublicense Language

A. Required in all sublicense and further sublicense agreements:

"I" UC-Caribou License. The definition of [Licensed Patent Rights] and the license granted by [Caribou/Licensor/Sublicensor] to [Company] includes the PCT/US2013/032589 patent family exclusively licensed by The Regents of the University of California and the University of Vienna (collectively, "Caribou's Licensors") to Caribou Biosciences, Inc. under the Exclusive License Agreement, dated April 16, 2013, by and among Caribou Biosciences, Inc., the University of Vienna, and The Regents of the University of California ("Caribou-UC/UV License"), as amended.

"2" Copies of this Agreement to Caribou's Licensors. Caribou is required to provide a confidential copy of this Agreement to Caribou's Licensors. Caribou may redact those portions of this Agreement that do not relate to payments or other obligations due to Caribou's Licensors; provided, however, that counsel for Caribou's Licensors has the right to review unredacted copies of this Agreement at Caribou's place of business or as otherwise mutually agreed upon. [*Note: For sublicenses with a right to further sublicense, add the following additional sentences*: "Caribou is also required to provide copies of any further sublicense agreements between [Company] and its sublicensees, or between such sublicensees and further sublicensees, that include the PCT/US2013/032589 patent family to Caribou's Licensors. [Company] must provide Caribou with unredacted copies of any and all future sublicense agreements between [Company] and its sublicensees, and any and all future sublicense agreements between such sublicensees and further sublicensees, that include the PCT/US2013/032589 patent family. Caribou may redact those portions of such sublicense agreements that do not relate to payments or other obligations due to Caribou's Licensors; provided, however, that counsel for Caribou's Licensors has the right to review unredacted copies of such sublicense agreements at Caribou's place of business or as otherwise mutually agreed upon."]

"3" Indemnification of Caribou's Licensors. [Company] shall indemnify, hold harmless, and defend ("Indemnify") Caribou's Licensors, the sponsors of the research that led to the PCTITS2013/032589 patent family, the inventors of the PCT/US2013/032589 patent family who assigned their rights to Caribou's Licensors/Howard Hughes Medical Institute ("HHMI"), and their employers, and the officers, employees, and agents of any of the foregoing (collectively, the "Caribou's Licensors Indemnitees") against any and all losses, damages, costs, fees, and expenses resulting from any claims or suits, including for product liability, brought by any third party arising out of the sublicense to the PCT/US2013/032589 patent family; except to the extent such losses, damages, costs, fees, and expenses result from Caribou's Licensors' gross negligence or willful misconduct or any breach of its representations and warranties to Caribou under the Caribou-UC/UV License. If one or both of Caribou's Licensors, in their sole discretion, believe that there will be a conflict of interest or they will not otherwise be adequately represented by counsel chosen by [Company] to defend them in accordance with this Section [ ], then the one or both of Caribou's Licensors may retain counsel of their choice to represent them at their own expense.

"4" Indemnification of HHMI. [Company] shall Indemnify (by counsel acceptable to HHMI) HHMI and its trustees, officers, employees, and agents (collectively, "HHMI. Indemnitees") from and against any liability, cost, expense, damage, deficiency, loss, or obligation of any kind or nature (including, without limitation, reasonable attorneys' fees and other costs and expenses of defense) based upon, arising out of, or otherwise relating to any third-party claim (collectively, "Claims") based upon, arising out of, or otherwise relating to the sublicense to the PCT/US2013/032589 patent family, including without limitation any cause of action relating to product liability. The previous sentence will not apply to any Claim that is determined with finality by a court of competent jurisdiction to result solely from the gross negligence or willful misconduct of an HHMI Indemnitee. If HHMI, in its sole discretion, believes there will be a conflict of interest or it will not otherwise be adequately represented by counsel chosen by [Company] to defend the HHMI Indemnitees in accordance with this Section [ ], then HHMI may retain counsel of its choice to represent HHMI. [*Note: For B. below, add as a final sentence: For clarity, acts conducted under the HHMI retained rights and licenses set forth in Section [] are not subject to the indemnification obligations of [Company] to HHMI.*]

"5**" HHMI Policy; HHMI as Third-Party Beneficiary**. The Caribou-UC/UV License is subject to the Howard Hughes Medical Institute (HHMI) statement policy on sharing research materials, data, and software (see

tittps://www.hilmi.oraiabout/policies). HHMI is not a party to this Agreement and has no liability to [Company] or any user of anything covered by this Agreement [*Note: For sublicenses with a right to further sublicense, add ", any sublicensee," after [Company] in this sentence]* , but HHMI is an intended third-party beneficiary of this Agreement, and certain of the provisions are for the benefit of HHMI and are enforceable by HHMI in its own name.

"6" Name and Trademarks. Nothing in this Agreement will be construed as conferring any right to use in advertising, publicity, or other promotional activities, any name, trademark, or Tradename of Caribou's Licensors.

"7" Termination of Caribou-UC/UV License. In the event that the Caribou-UC/UV License is terminated for any reason and [Company] is in compliance with this Agreement, Caribou's Licensors are under an obligation to enter into a direct license to the PCT/US2013/032589 patent family with [Company] having the same financial terms that Caribou's Licensors would have received under this Agreement; provided, however, that Caribou's Licensors shall not be bound to perform any duties or obligations that extend beyond the duties and obligations existing under the Caribou-UC/UV License. In such event, this Agreement shall remain in full force and effect but the PCT/US2013/032589 patent family shall be removed from the definition of Licensed Patent Rights and the obligations set forth in Sections "1" through "6" above [*and other relevant sections below*] of this Agreement shall cease. [*Note: Delete this last sentence if the Agreement is solely a license to the PCT/US2013/032589 patent family, without any other licenses to intellectual property, research collaborations, cross-licenses, etc.*]

Note: "3," "4," and "5" above to be included in survival clause.

B. Required in all EXCLUSIVE sublicense and further sublicense agreements, regardless of Licensed Field of Use:

All rights granted by [Caribou] to [Company] in the PCT, S2013/032589 patent family are subject to the reservation of educational and research rights by Caribou's Licensors, its faculty, employees, and students and to the right of Caribou's Licensors to allow other educational and non-profit institutions to make and use the PCT/US2013/032589 patent family inventions for educational and research purposes; and are subject to a paid-up, non-exclusive, irrevocable license reserved by HHMI to make and use the PCT/US2013:032589 patent family inventions for its research purposes.

Note: Add bracketed language in "4" above.

C. In addition to B. above, required in all EXCLUSIVE sublicense and further sublicense agreements in the human Diagnostics Field or the human Therapeutic Field:

All rights granted by [Caribou/Sublicensee] to [Company] are also subject to Caribou's Licensors' right to license the PCT/US2013/032589 patent family to any third party solely for research and development purposes having the express purposes of developing products covered by the PCT/US2013/032589 patent family for use solely for protection from, treatment of, or diagnosis of certain neglected diseases [*insert Appendix 2 list of Neglected Diseases*] by any nonprofit organization or other third party for sale solely in an economically disadvantaged country included on the "Last Developed" countries list established by the United Nations Conference on Trade and Development (but excluding China and India).

D. Add for licenses to inventions only disclosed in the fourth U.S. provisional (USSN 61/765,576, filed February 15, 2013) (named inventors received federal funding) and not disclosed in May 25 2012; USSN 61/716,256, filed October 19, 2012; and USSN 61/757,640) to which the PCT/US2013/032589 patent family claims priority:

(a) The Caribou-UC/UV License may be subject to the requirements of 35 U.S.C. 200 et seq., as amended, and implementing regulations and policies, as well as the National Institutes of Health "Principles and Guidelines for Recipients of NIH Research Grants and Contracts on Obtaining and Disseminating Biomedical Research Resources," set forth in 64 F.R. 72090 (December 23, 1999).

(b) To the extent required under applicable laws of the United States, any and all [Licensed Products] made, have made, used, sold, or offered for sale in the United States or imported into the United States shall be manufactured substantially in the United States, subject to any applicable waiver obtained by or on behalf of Caribou or Caribou's Licensors.

(c) To the extent required by law, [Company] will only collect royalties on sales to, or for use by, the United States Government in an amount of %. [*Note: To be allocated by Caribou; in the event where [Licensed Patent Rights] only includes the PCT/US2013/032589 patent family, such amount shall be zero percent (0%)]*

Exhibit B

[***]

Exhibit 10.26

AMENDED AND RESTATED OFFICE/LABORATORY LEASE

BETWEEN

2929 SEVENTH ST., LLC (LANDLORD) AND

CARIBOU BIOSCIENCES, INC. (TENANT)

2929 Seventh Street Berkeley, California

TABLE OF CONTENTS

OFFICE/LABORATORY LEASE

ARTICLE 1
BASIC LEASE PROVISIONS

1.1 BASIC LEASE PROVISIONS

In the event of any conflict between these Basic Lease Provisions and any other Lease provision, such other Lease provision shall control.

(1) BUILDING AND ADDRESS:

2929 Seventh Street
Berkeley, California 94710

(2) LANDLORD AND ADDRESS:

2929 Seventh St., LLC
1120 Nye Street, Suite 400
San Rafael, California 94901

Notices to Landlord shall be addressed:

2929 Seventh St., LLC
c/o Wareham Property Group
1120 Nye Street, Suite 400
San Rafael, California 9490 I

With a copy to:

Stewart Ward & Josephson LLP
1601 Response Road, Suite 360
Sacramento, California 95815
Attention: Winnifred C. Ward, Esq.

And to:

Shartsis Friese LLP
One Maritime Plaza, 18th Floor
San Francisco, California 94901
Attention: Senior Real Estate Partner

(3) TENANT AND NOTICE ADDRESS:

(a) Name: Caribou Biosciences, Inc.

(b) State of incorporation: Delaware

Tenant shall promptly notify Landlord of any change in the foregoing items.

(c) Notices to Tenant shall be addressed:

At the Premises (at Suite 105)
Attention: President

With a copy to:

At the Premises (at Suite 1 05)
Attention: Chief Legal Officer

(4) DATE OF THIS LEASE: as of March 31, 2021

(5) INITIAL TERM: April I, 2021 (the "Commencement Date") through March 31, 2031 (the "Expiration Date")

(6) OPTION TO EXTEND: One 5-year option as more specifically described in Section 2.2.

(7) MONTHLY BASE RENT:

PERIOD	**MONTHLY BASE RENT**				
	SUITE 100	SUITE 105	SUITE 110	SUITE 120	TOTAL
*04/01/21 - 12/31/21	$ 93,431.00	$ 98,538.00	$5,587.00	$65,005.00	$262,561.00
01/01/22 - 12/31/22	$ 96,234.00	$101,494.00	$5,755.00	$67,280.00	$270,763.00
01/01/23 - 12/31/23	$ 99,121.00	$104,539.00	$5,928.00	$69,635.00	$279,223.00
01/01/24 - 12/31/24	$102,095.00	$107,675.00	$6,106.00	$72,072.00	$287,948.00
01/01/25 - 12/31/25	$105,158.00	$110,905.00	$6,290.00	$74,595.00	$296,948.00
01/01/26 - 12/31/26	[Monthly Base Rent for all Suites consolidated into one monthly payment]				$403,130.00
01/01/27 - 12/31/27	[Monthly Base Rent for all Suites consolidated into one monthly payment]				$417,240.00
01/01/28 - 12/31/28	[Monthly Base Rent for all Suites consolidated into one monthly payment]				$431,843.00
01/01/29 - 12/31/29	[Monthly Base Rent for all Suites consolidated into one monthly payment]				$446,958.00
01/01/30 - 12/31/30	[Monthly Base Rent for all Suites consolidated into one monthly payment]				$462,602.00
01/01/31 - 03/31/31	[Monthly Base Rent for all Suites consolidated into one monthly payment]				$478,793.00

* Assumes a Commencement Date of April I, 2021 as to Suite 120; see Section 2.2(a) below.

(8) PREMISES: The space located within the Building, as outlined (as to each Suite Number) on Exhibit A hereto, to be known collectively as "Suite 105".

(9) RENTABLE AREA AND SUITE NUMBERS OF THE PREMISES:

Suite 100:	23,500 square feet
Suite 105:	25,000 square feet
Suite 110:	1,416 square feet
Suite 120:	11,819 square feet

(10) SECURITY DEPOSIT: Seven Hundred Forty-Five Thousand Ninety-Two and 66/100 Dollars ($745,092.66) (i.e., Five Hundred Ninety-Three Thousand Two Hundred Ninety-Two and 66/100 Dollars ($593,292.66) held under the Existing Lease, plus the additional sum of One Hundred Fifty-One Thousand Eight Hundred Dollars ($151,800.00); the "Additional Security Deposit").

(11) TENANT'S USE OF PREMISES: General office, research and development, laboratory, and legal uses ancillary thereto (the "Permitted Use").

(12) PARKING:

(a) Up to 96 parking spaces in the following parking areas:

Lot located on
East Side of Building (the "East Lot"):
44 spaces reserved for the exclusive use of Tenant (the "Building Spaces")

2919 7th Street/999 Anthony Street
building lot as shown on Exhibit A-2 hereto ("Anthony Street Lot"): 9 unreserved spaces

Parking structures located within the Campus
as shown on Exhibit A-2 hereto ("Aquatic Park Lot"): 43 unreserved spaces (which may or may not be partially located in the Anthony Street Lot)

(b) The rates for the unreserved parking spaces shall be as follows:

44 spaces: $0.00/space/month, through December 31, 2023; thereafter, commencing as of January I, 2024, $61.00/space/month, through December 31, 2025; thereafter, commencing as of January I, 2026, at the standard prevailing monthly rates being charged from time to time by Landlord or its parking operator without regard to discounts provided to any other occupants of the Building (the "Standard Parking Rates")

34 spaces: $61.00/space/month, through December 31, 2025; thereafter, commencing as of January I, 2026, at the Standard Parking Rates

18 spaces: At the Standard Parking Rates. The current rate for unreserved parking spaces is $125.00/space/month

(13) BROKERS:

Landlord's Broker: None

Tenant's Broker: None

(14) SUITE 120 TENANT IMPROVEMENT ALLOWANCE: Three Hundred Fifty- Four Thousand Five Hundred Seventy Dollars ($354,570.00) (i.e., a sum equal to $30.00 per square foot of Rentable Area for Suite 120)

1.2 ENUMERATION OF EXHIBITS AND RIDER(S)

The Exhibits and Rider set forth below and attached to this Lease are incorporated in this Lease by this reference:

EXHIBIT A	Outline of Premises
EXHIBIT A-1	Outline of Offering Spaces
EXHIBIT A-2	Parking Areas
EXHIBIT B	Workletter Agreement
EXHIBIT C-1	Laboratory Rules and Regulations
EXHIBIT C-2	Rules and Regulations
EXHIBIT D	Campus

1.3 DEFINITIONS

For purposes hereof, in addition to terms defined elsewhere in this Lease, the following terms shall have the following meanings:

ADDITIONAL SECURITY DEPOSIT: The amount specified in Section 1.1(10).

AFFILIATE: Any corporation or other business entity that is currently owned or controlled by, owns or controls, or is under common ownership or control with Tenant or Landlord, as the case may be.

BANKRUPTCY CODE: As defined in Section 11.3.

BUILDING: The building located at the address specified in Section 1.1. The Building includes office and laboratory uses.

BUILDING SPACES. As defined in Section 1.1.

BUSINESS DAY. Monday through Friday except holidays recognized by the United States Government.

CABLE: As defined in Section 8.2.

CITY: The City of Berkeley, California.

CAMPUS: Those certain properties owned by Landlord and Landlord's Affiliates, including the Project, commonly known as the Aquatic Park Center Campus and identified on Exhibit D to this Lease, as such properties may change (including, without limitation, the addition of other adjacent properties that may be acquired by Landlord and/or Landlord's Affiliates from time to time).

CAMPUS MANAGER: The person designated by Landlord as the senior property manager for the Campus.

COMMENCEMENT DATE: The date specified in Section 1.1 as the Commencement Date.

COMMON AREAS: All areas of the Campus made available by Landlord from time to time for the general common use or benefit of the tenants of the Campus, and their employees and invitees, or the public, as such areas currently exist and as they may be changed from time to time.

DEFAULT: As defined in Section 11.1.

DECORATION: Tenant Alterations which do not require a building permit and which do not involve any of the structural elements of the Building, or any of the Building's systems, including its electrical, mechanical, plumbing, security, heating, ventilating, air-conditioning, communication, and fire and life safety systems.

DEFAULT RATE: Two (2) percentage points above the rate then most recently announced by Bank of America N.A. at its San Francisco main office as its base lending reference rate, from time to time announced, but in no event higher than the maximum rate permitted by Law.

EAST LOT: As defined in Section 1.1.

EXISTING LEASE: As defined in Section 2.1.

EXISTING LEASE FIRST AMENDMENT: As defined in Section 2.1.

EXPIRATION DATE: The date specified in Section 1.1 as the Expiration Date.

FORCE MAJEURE: Any accident, casualty, act of God, war or civil commotion, strike or labor troubles, or any cause whatsoever beyond the reasonable control of Landlord or Tenant, as applicable, including water shortages, energy shortages or governmental preemption in connection with an act of God, a national emergency, disease outbreak, epidemic or pandemic (including without limitation COVID-19), or by reason of Law, government regulations or restrictions (e.g., shelter-in-place orders or orders requiring the closure of businesses), or other declaration of public health emergency, or by reason of the conditions of supply and demand which have been or are affected by act of God, war or other emergency. Notwithstanding the foregoing, the financial inability of Tenant to perform its obligations under this Lease shall not constitute a Force Majeure event, and in no event shall a Force Majeure event delay or excuse Tenant's obligation to timely and fully pay all Rent owing under this Lease.

GREEN BUILDING STANDARDS: One or more of the following: the U.S. EPA's Energy Star® Portfolio Manager, the Green Building Initiative's Green GlobesTM building rating system, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) building rating system, the ASHRAE Building Energy Quotient (BEQ), the Global Real Estate Sustainability Benchmark (GRESB), or other standard for high performance buildings adopted by Landlord with respect to the Building or the Project, as the same may be revised from time to time.

HAZARDOUS MATERIALS: As defined in Section 7.1(f). HAZARDOUS MATERIALS LAWS: As defined in Section 7.1(f).

INDEMNITEES: Collectively, Landlord, any Mortgagee or ground lessor of the Property, the Campus Manager and the leasing manager for the Campus and their respective partners, members, directors, and officers.

INITIAL TERM: As defined in Section 2.2(a).

LAND: The parcel(s) of real estate on which the Building and Project are located.

LANDLORD WORK: The construction or installation of improvements to the Premises to be furnished by Landlord, if any, as specifically described in the Workletter or exhibits attached hereto.

LAWS OR LAW: All laws, ordinances, rules, regulations, other requirements, orders, rulings or decisions adopted or made by any governmental body, agency, department or judicial authority having jurisdiction over the Property, the Premises or either party's activities at the Premises and any covenants, conditions or restrictions of record as of the date of this Lease which affect the Property.

LEASE: This instrument and all exhibits and riders attached hereto, as may be amended from time to time.

LEASEHOLD IMPROVEMENTS: As defined in Section 12.1.

MONTHLY BASE RENT: The monthly base rent specified in Section I. I.

MORTGAGEE: Any holder of a mortgage, deed of trust or other security instrument encumbering the Property.

NAMED TENANT: As defined in Section 2.1(b).

NATIONAL HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day and other holidays recognized by the janitorial and other unions servicing the Building in accordance with their contracts.

OPERATING EXPENSES: All costs, expenses and disbursements of every kind and nature which Landlord shall pay or become obligated to pay during the Term in connection with the ownership, management, operation, maintenance, replacement and repair of the Building and the Property, including, without limitation, property management fees not to exceed three and one- half percent (3.5%) of gross revenues for the Building (the "PM Fee Cap"); costs and expenses of any capital expenditure or improvement that is Landlord's responsibility under this Lease, and if Landlord reasonably elects to amortize such costs and expenses over a period that Landlord may reasonably determine (provided, however, that Landlord shall amortize any single expense that exceeds $100,000.00 in any calendar year), such costs and expenses shall be together with interest thereon at the lower of the rate incurred by Landlord to finance such capital expenditure or improvement or the Default Rate, provided that any such capital expenditure or improvement shall be limited to that (a) made to the Property after the Commencement Date in order to comply with Laws enacted after the Commencement Date (except to the extent such capital expenditure or improvement already is included in Operating Expenses prior to the Commencement Date), or (b) installed after the Commencement Date which are for the purpose of reducing or controlling Operating Expenses (the "Permitted Capital Expenditures"); the costs of changing utility service providers; an equitable allocation of management office expenses (including, without limitation, office rent, supplies, equipment, salaries, wages, bonuses and other compensation relating to employees of Landlord or its agents engaged in the management, operation, repair, or maintenance of the Campus, the costs and expenses of which shall be equitably prorated and apportioned between the Building and the other buildings or properties within the Campus); and, if Tenant and its employees have the right to use the same, the cost of operating a fitness center and/or any conference centers that are available for use by Tenant, as reasonably determined by Landlord, which centers may be located in other buildings in the Campus.

Notwithstanding anything to the contrary in the preceding paragraph, Operating Expenses shall not include: (i) costs of alterations of or improvements to the premises of tenants of the Project or Campus, (ii) costs or expenses of capital expenses or improvements to or of the Building or any other part of the Project or Campus, other than Permitted Capital Expenditures, (iii) depreciation charges, (iv) interest and principal payments on loans (except for loans for Permitted Capital Expenditures as provided above), (v) ground rental payments, (vi) real estate brokerage and leasing commissions, (vii) advertising and marketing expenses, (viii) costs of Landlord to the extent reimbursed by insurance proceeds, tenants, or other third parties, (ix) expenses incurred in negotiating leases of tenants in the Project or Campus or enforcing lease obligations of tenants in the Project or Campus, (x) accountants' fees, attorneys' fees and other professional fees and costs incurred in connection with the defense of Landlord's title to or interest in the Project or Campus or any part thereof, and the sale, transfer, financing or refinancing of the Project or Campus, (xi) Landlord's general corporate overhead, (xii) costs incurred in connection with services or other benefits which are provided to tenants or occupants other than Tenant, but not made available to Tenant, (xiii) reserves, including reserves for capital expenditures or improvements, bad debts, or rental losses, (xiv) costs incurred in connection with upgrading the Building and/or any other part of the Project or Campus to comply with the current interpretation of disability, life, fire and safety codes, ordinances, statutes, or other Laws in effect on the Commencement Date, including, without limitation, the ADA (as defined below), and including penalties or damages incurred due to such non-compliance (except to the extent such capital expenditure or improvement already is included in Operating Expenses prior to the Commencement Date), (xv) wages, salaries or other compensation paid to any employee of Landlord (A) not dedicated full time to the Project or Campus (unless such costs are reasonably prorated to reflect time spent on the Campus) and/or (B) having a rank higher than Campus Director, (xvi) utility costs for which any tenant or occupant contracts directly with the utility provider, or resulting from excess or after-hours usage by other tenants or occupants of the Project or Campus, or for which Landlord is reimbursed directly by a tenant, (xvii) costs incurred in connection with any environmental investigation, monitoring, clean up, response action, or remediation with respect to a condition in existence on or prior to the Commencement Date on, in, under or about the Premises, the Building or any other part of the Property, (xviii) deductibles under any insurance policy in excess of Twenty-Five Thousand Dollars ($25,000.00) in any one calendar year, (xix) property management, asset management or other management fees other than property management fees not to exceed the PM Fee Cap, and (xx) any item that, if included, in Operating Expenses, would involve a double collection for such item by Landlord. In the event there exists a conflict as to an expense that is specified to be included in Operating Expenses and is also specified to be excluded from Operating Expenses within the above list, the exclusions listed above shall prevail and the expenses shall be deemed excluded. If any Operating Expense, though paid in one (I) year, relates to more than one calendar

year, at the option of Landlord such expense may be proportionately allocated among such related calendar years; provided that only those periods falling within the Term of the Lease shall be allocated to Tenant. Landlord agrees that Landlord will not collect or be entitled to collect Operating Expenses from Tenant in an amount in excess of Tenant's Share of one hundred percent (100%) of the Operating Expenses attributable to the Building and the remainder of the Project or Campus. In addition, Operating Expenses shall be reduced by all cash discounts, trade discounts or quantity discounts received by Landlord or Landlord's managing agent in the purchase of any goods, utilities or services in connection with the prudent operation of the Building. Operating Expenses for the Property that are not, in Landlord's reasonable discretion, allocable solely to either the office or laboratory portion of the Building shall be equitably allocated by Landlord between/amongst such uses. The above enumeration of services and facilities shall not be deemed to impose an obligation on Landlord to make available or provide such services or facilities except to the extent if any that Landlord has specifically agreed elsewhere in this Lease to make the same available or provide the same.

PREMISES: The space located in the Building at the Suite Numbers listed in Section 1.1 and depicted on Exhibit A attached hereto.

PROJECT or PROPERTY: The Project consists of the office and laboratory building located at the street address specified in Section 1.1, and associated surface and garage parking as designated by Landlord from time to time, landscaping and improvements, together with the Land, any associated interests in real property, and the personal property, fixtures, machinery, equipment, systems and apparatus located in or used in conjunction with any of the foregoing. The Project may also be referred to as the Property.

PROJECT'S SUSTAINABILITY PRACTICES: The operations and maintenance practices for the Building, whether incorporated into the Building's Rules and Regulations, construction rules and regulations or separate written sustainability policies of Landlord with respect to the Building or the Project, as the same may be revised from time to time so long as such revisions do not materially and adversely impact Tenant's use of the Premises or materially increase Tenant's costs, addressing, among other things: energy efficiency; energy measurement and reporting; water usage; recycling, composting, and waste management; indoor air quality; and chemical use.

REAL PROPERTY: The Property excluding any personal property.

RENT: Collectively, Monthly Base Rent, Rent Adjustments and Rent Adjustment Deposits, and all other charges, payments, late fees or other amounts required to be paid by Tenant under this Lease.

RENT ADJUSTMENT: Any amounts owed by Tenant for payment of Operating Expenses and/or Taxes. The Rent Adjustments shall be determined and paid as provided in Article 4.

RENT ADJUSTMENT DEPOSIT: An amount equal to Landlord's estimate of the Rent Adjustment attributable to each month of the applicable calendar year (or partial calendar year) during the Term, as provided in Article 4.

RENTABLE AREA OF THE PREMISES: The amount of square footage set forth in Section 1.1(9) above.

SECURITY DEPOSIT: The funds specified in Section 1.1(I 0), if any, deposited by Tenant with Landlord as security for Tenant's performance of its obligations under this Lease.

STANDARD OPERATING HOURS: Monday through Friday from 8:00 A.M. to 6:00 P.M. and Saturdays from 9:00 A.M. to 1:00 P.M., excluding National Holidays.

SUBSTANTIALLY COMPLETE or SUBSTANTIAL COMPLETION: The completion of the Landlord Work or Tenant Work, as the case may be, except for minor insubstantial details of construction, decoration or mechanical adjustments which remain to be done.

SUITE 120: As defined in Section 1.1.

SUITE 120 TENANT IMPROVEMENT ALLOWANCE: As defined in Section 1.1(14).

TAXES: All federal, state and local governmental taxes, assessments, license fees and charges of every kind or nature, whether general, special, ordinary or extraordinary, which Landlord shall pay or become obligated to pay because of or in connection with the ownership, leasing, management, control, sale, transfer, or operation of the Property or any of its components (including any personal property used in connection therewith) or Landlord's business of owning and operating the Property, which may also include any rental, revenue, general gross receipts or similar taxes levied in lieu of or in addition to general real and/or personal property taxes, but only to the extent such taxes, assessments, license fees and charges accrued during and relate to the Tenn. For purposes hereof, Taxes for any year shall be Taxes which are assessed for any period of such year falling within the Term, whether or not such Taxes are billed and payable in a subsequent calendar year. There shall be included in Taxes for any year falling within the Tern the amount of all fees, costs and expenses (including reasonable attorneys' fees) paid by Landlord during such year in seeking or obtaining any refund or reduction of Taxes. Taxes for any year shall be reduced by the net amount of any tax refund received by Landlord attributable to such year. If a special assessment payable in installments is levied against any part of the Property, Taxes for any year shall include only the installment of such assessment and any interest payable or paid during such year to the extent falling with the Term. Taxes shall be determined without reference to any abatement or exemption from or credit against Taxes applicable to all or part of the Property. Notwithstanding anything to the contrary herein, Taxes shall not include (i) any items included in Operating Expenses, (ii) any items payable by Tenant under Section 4.4 below, (iii) any federal, state or local inheritance, general income, excess profit, franchise, capital stock, gift, estate taxes or other taxes to the extent applicable to Landlord's general or net income (as opposed to rents or receipts attributable to operations at the Property), except that if a change occurs in the method of taxation resulting in whole or in part in the substitution of any such taxes, or any other assessment, for any Taxes as above defined, such substituted taxes or assessments shall be included in the Taxes, (iv) any documentary transfer taxes, and (v) interest or penalties resulting from Landlord's failure to pay Taxes in a timely manner (collectively, "Excluded Taxes"). Taxes for the tax year in which the Term shall commence or expire shall be apportioned according to the number of days during which each patty shall be in possession during such tax year. Tenant and Landlord acknowledge that Proposition 13 was adopted by the voters of the State of California in the June, 1978 election and that assessments, taxes, fees, levies and charges may be imposed by governmental agencies for such purposes as fire protection, street, sidewalk, road, utility construction and maintenance, refuse removal and for other governmental services which may formerly have been provided without charge to property owners or occupants. Other than Excluded Taxes, it is the intention of the parties that all new and increased assessments, taxes, fees, levies and charges due to any cause whatsoever are to be included within the definition of Taxes for purposes of this Lease.

TENANT ADDITIONS: Collectively, Landlord Work, Tenant Work and Tenant Alterations.

TENANT ALTERATIONS: Any alterations, improvements, additions, installations or construction in or to the Premises or any Building systems serving the Premises (excluding Landlord Work or Tenant Work); and any supplementary air-conditioning systems installed by Landlord or by Tenant at Landlord's request pursuant to Section 6.1(b).

TENANT DELAY: Any event or occurrence that delays the completion of the Landlord Work, if any, which is caused by or is described as follows:

(a) special work, changes, alterations, additions, or any Change Orders (defined in the Workletter) requested or made by Tenant in the design or finish in any part of the Premises after approval of the plans and specifications (as described in the Workletter);

(b) Tenant's delay in submitting plans, supplying information, approving plans, specifications or estimates, giving authorizations or otherwise;

(c) failure to pay for those portions of Tenant Work that Tenant is obligated to pay for pursuant to the Workletter;

(d) the performance or completion by Tenant or any person engaged by Tenant of any work in or about the Premises;

(e) failure to perform or comply with any obligation or condition binding upon Tenant pursuant to the Workletter, including the failure to approve and pay for such Landlord Work or other items if and to the extent the Workletter provides they are to be approved or paid by Tenant; or

(f) any other action of Tenant which delays Substantial Completion.

TENANT PARTY OR TENANT PARTIES: As defined in Section 7.1(f)(l)(x).

TENANT WORK: All work installed or furnished to the Premises by Tenant, if any, pursuant to the Workletter.

TENANT'S SHARE: The percentage that represents the ratio of the Rentable Area of the Premises to the Rentable Area of the Building, as determined by Landlord from time to time. Tenant acknowledges that the Rentable Area of the Premises or Building may change from remeasurement or otherwise during the Term or as a result of Tenant leasing additional space within the Building; provided, however, in no event shall the Rentable Area of the Premises or Building change during the Initial Term except as a result of Tenant leasing additional space within the Building. Tenant's Share is defined as 78.2% as of the date of this Lease.

TERM: The initial term of this Lease commencing on the Commencement Date and expiring on the Expiration Date, and extension of the initial term, if any.

TERMINATION DATE: The Expiration Date or such earlier date as this Lease terminates or Tenant's right to possession of the Premises terminates.

WORKLETTER: The Agreement regarding the manner of completion of Landlord Work and Tenant Work set forth on Exhibit B attached hereto.

ARTICLE 2
PREMISES, TERM, FAILURE TO GIVE POSSESSION, AND PARKING

2.1 LEASE OF PREMISES; EXISTING LEASE; RIGHT OF FIRST OFFER

(a) Existing Lease. Tenant currently leases the Premises (other than Suite 120) pursuant to the terms of that certain Laboratory Lease dated August 20, 2014 (the "Original Lease"), as amended by that certain First Amendment to Laboratory Lease dated October 29, 2015 (the "Existing Lease First Amendment"), that certain Second Amendment to Laboratory Lease dated April 29, 2016, that certain Third Amendment to Laboratory Lease dated April 3, 2018, that certain Fourth Amendment to Laboratory Lease dated September 6, 2018, that certain Fifth Amendment to Laboratory Lease dated February I, 2019, and that certain Sixth Amendment to Laboratory Lease dated July 8, 2019 (collectively, the "Existing Lease"), the term of which lease expires as of December 31, 2025. It is the intent of the parties that this Lease shall amend, restate, supersede and replace in its entirety the Existing Lease. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Premises for the Term and upon the terms, covenants and conditions provided in this Lease.

(b) Right of First Offer.

(1) Tenant shall have a one-time right of first offer (the "Right of First Offer") with respect to Suite 130 on the first floor of the Building, consisting of approximately 10,062 square feet of Rentable Area, and Suite 200 on the second floors of the Building, consisting of approximately 7,140 square feet of Rentable Area (both as shown on Exhibit A-I to this Lease), following the date of this Lease (the "Offering Spaces"). If Tenant leases either of the Offering Spaces pursuant to the terms of this Section 2.1(b), then Tenant shall have a one-time right of first offer on the other Offering Space pursuant to the terms of this Section 2.1(b).

(2) Landlord and Tenant acknowledge that the Offering Spaces are currently leased to existing tenants. Prior to the date Landlord offers either of the Offering Spaces for lease to a potential third-patty tenant or other potential occupant (other than to any of such existing tenants), Landlord shall advise Tenant (the "Advice") of the terms under which Landlord is prepared to lease such Offering Space to Tenant. Tenant may lease such Offering Space in its entirety only, under such terms, by delivering written notice of exercise to Landlord (the "Notice of Exercise") within five (5) days after the date of the Advice, except that Tenant shall have no such Right of First Offer, and Tenant may not exercise its right under this Section 2.1(b), if: (i) at the time that Landlord would otherwise deliver the Advice, a Default on the part of Tenant exists under this Lease or there then exists any event or condition which, with the giving of notice or the passage of time or both, would constitute such a Default; (ii) any portion of the Premises is sublet at the time Landlord would otherwise deliver the Advice; (iii) Tenant is not occupying the entire Premises (other than due to a casualty or condemnation event); (iv) the Offering Space is not intended for the exclusive use of Tenant; or (v) Tenant cannot demonstrate to Landlord's reasonable satisfaction that Tenant's creditworthiness is sufficient in light of the increased Rent obligations associated with the Offering Space. Tenant shall deliver evidence of Tenant's creditworthiness concurrently with delivery of the Notice of Exercise.

(3) The term with respect to the Offering Space (the "Offering Space Term") shall be as stated in the Advice and upon commencement of the Offering Space Term, the Offering Space shall be considered a part of the Premises, provided that all of the terms stated in the Advice shall govern Tenant's leasing of the Offering Space and only to the extent that they do not conflict with the Advice, the terms and conditions of this Lease shall apply to the Offering Space. The foregoing notwithstanding, if Landlord is unable to deliver possession of the Offering Space to Tenant on the commencement of the Offering Space Term as stated in the Advice, Landlord shall not be liable for any claims, damages or liabilities by reason thereof, but the Offering Space Term shall commence upon the date possession of the Offering Space is delivered by Landlord to Tenant. The Offering Space shall be accepted by Tenant in "AS IS" condition, and Landlord's only obligation with respect to the condition of the Offering Space as of the commencement of the Offering Space Term shall be to deliver such Offering Space in such condition.

(4) Tenant shall pay Monthly Base Rent for the Offering Space at the rate or rates set forth in the Advice, which rate or rates shall reflect the Fair Market Rent for the Offering Space as determined by Landlord in Landlord's reasonable judgment. For purposes of this Right of First Offer provision (and notwithstanding how "Fair Market Rent" is determined under Section 2.2(b) below), "Fair Market Rent" shall mean the annual rental rate per square foot for space comparable to the Offering Space in the Building and laboratory buildings comparable to the Building in Berkeley and Emeryville, California under leases and renewal and expansion amendments being entered into at or about the time that the Fair Market Rent is being determined, giving appropriate consideration to tenant concessions, brokerage commissions, tenant improvement allowances, and the method of allocating operating expenses and taxes. Notwithstanding the foregoing, space leased under any of the following circumstances shall not be considered to be comparable for purposes hereof: (i) the lease term is for less than the lease term of the Offering Space, (ii) the space is encumbered by the option rights of another tenant, or (iii) the space has a lack of windows and/or an awkward or unusual shape or configuration. The foregoing is not intended to be an exclusive list of space that will not be considered to be comparable. The determination of Fair Market Rent shall also take into consideration any reasonably anticipated changes in the Fair Market Rent from the time such Fair Market Rent is being determined and the time such Fair Market Rent will become effective under the Lease.

(5) The Right of First Offer shall terminate on the earliest to occur of: (i) Tenant's failure to exercise its Right of First Offer within the 5-day period provided in Section 2.1(b)(2) above as to either Offering Space; (ii) the date Landlord would have provided Tenant with an Advice if Tenant had not been in violation of one or more of the conditions set forth in Section 2.1(b)(2); or (iii) the expiration or earlier termination of the Term (as the same may be extended pursuant to Section 2.2(b) below).

(6) If Tenant exercises its Right of First Offer as to any of the Offering Spaces, Landlord shall prepare an amendment (the "Offering Amendment") adding the subject Offering Space to the Premises on the terms set forth in the Advice and reflecting the changes in the Monthly Base Rent, Rentable Square Footage of the Premises and other appropriate terms. A copy of the Offering Amendment shall be sent to Tenant within a reasonable time after Landlord's receipt of the Notice of Exercise executed by Tenant, and Tenant shall execute and return the Offering Amendment to Landlord within fifteen (15) days thereafter, but an otherwise valid exercise of the Right of First Offer shall be fully effective whether or not the Offering Amendment is prepared and/or executed.

(7) Notwithstanding anything to the contrary contained herein, Tenant's Right of First Offer is subject and subordinate to the expansion rights (whether such rights are designated as a right of first offer, right of first refusal, expansion option or otherwise) of any tenant or other occupant of the Building existing as of the date of this Lease.

(8) Notwithstanding anything to the contrary contained herein, Tenant's rights under this Section 2.1(b) are personal to the original Tenant executing this Lease or a Permitted Transferee to whom this Lease is assigned ("Named Tenant") and shall not be assigned or assignable, in whole or in part, to any third-party other than a Permitted Transferee. Any assignment or other transfer of such rights by Named Tenant shall be void and of no force or effect. Without limiting the generality of the foregoing, no sublessee of the Premises shall be permitted to exercise the rights granted to Tenant under this Section 2.l(b).

2.2 TERM

(a) Initial Tenn. The initial term of this Lease ("Initial Tern") shall be as set forth in Section 1.1(5).

(b) Option to Extend. Provided that (i) Tenant has not sublet any portion of the Premises other than Suite 120, and (ii) no monetary Default or material non-monetary Default by Tenant exists at the time of exercise or at the time of commencement of the Extended Term, the Term of this Lease shall be subject to one (I) extension option for an additional period of sixty (60) months (the "Extension Option"), commencing as of the expiration of the Initial Tern, and expiring on the date that is sixty (60) full calendar months thereafter (the "Extended Term"), exercisable as follows:

(1) The Extension Option shall be upon the same material terms and conditions contained in this Lease, except that (i) the initial Monthly Base Rent for the Premises shall be equal to the fair market rent for the Premises determined in the manner set forth in Section 2.2(b)(3) below, (ii) on each anniversary of the commencement date of the Extended Term, the Monthly Base Rent shall increase three and one-half percent (3\/,%), on a cumulative basis, and (iii) Tenant shall accept the Premises in an "as is" condition without any obligation of Landlord to repaint, remodel, repair, improve or alter the Premises (subject, however, to the terms of Section 8.1 of the Lease).

(2) Tenant's election to exercise the Extension Option must be given to Landlord in writing no less than three hundred and sixty-five (365) days prior to the expiration of the Initial Term (the "Extension Notice"). Within thirty (30) days of Landlord's receipt of the Extension Notice, Landlord shall send Tenant written notice of Landlord's good faith determination of the Fair Market Rent for the Premises (the "Fair Market Rent Notice"). For purposes of this Section, the term "Fair Market Rent" shall mean the base rental rate, periodic rental rate adjustment and other charges and increases, if any, for space comparable in size, location and quality to the Premises under a primary lease (and not sublease) to new or renewing tenants, for a comparable term with a tenant improvement allowance, if applicable and taking into consideration such amenities as existing improvements, view, floor on which the Premises are situated and the like, situated in buildings in Berkeley and Emeryville, California. Notwithstanding anything to the contrary contained herein, the Extension Option shall automatically terminate and be of no further force or effect, whether or not Tenant has timely exercised the Extension Option, if a monetary Default or material non-monetary Default exists at the time of exercise of the Extension Option or at the time of commencement of the Extended Term.

(3) If Tenant properly exercises the Extension Option, the Monthly Base Rent during the Extended Term shall be determined in the following manner. The Monthly Base Rent as of the commencement of the Extended Term shall be adjusted to an amount equal to the Fair Market Rent for the Premises as specified in the Fair Market Rent Notice, subject to Tenant's right of arbitration as set forth below. Notwithstanding the above, under no circumstances will the Monthly Base Rent during the first twelve (12) months of the Extension Term be less than the Monthly Base Rent for the last month of the Initial Term. If Tenant believes that the Fair Market Rent specified in the Fair Market Rent Notice exceeds the actual Fair Market Rent for the Premises as of the date of such notice, then Tenant shall so notify Landlord within ten (10) days of Tenant's receipt of the Fair Market Rent Notice. If Tenant fails to so notify Landlord within such 10-day period, Landlord's determination of the Fair Market Rent shall be final and binding upon the parties. If the parties are unable to agree upon the Fair Market Rent within ten (10) days after Landlord's receipt of Tenant's objection to the Fair Market Rent Notice, the amount of Monthly Base Rent as of the commencement of the Extended Term shall be determined as follows:

(i) Within twenty (20) days after the 10-day period has expired and the parties have failed to agree on the Fair Market Rent, Tenant, at its sole expense, shall obtain and deliver in writing to Landlord a determination of the Fair Market Rent for the Premises for a term equal to the Extended Term from a broker ("Tenant's Broker") licensed in the State of California and engaged in the laboratory brokerage business in Berkeley/Emeryville, California, for at least the immediately preceding five (5) years. If Landlord accepts such determination, the Monthly Base Rent for the Extended Term shall be adjusted to an amount equal to the amount determined by Tenant's Broker.

(ii) If Landlord does not accept such determination, within fifteen (15) days after receipt of the determination of Tenant's broker, Landlord shall designate a broker ("Landlord's Broker") licensed in the State of California and engaged in the laboratory brokerage business in Berkeley/Emeryville, California, for at least the immediately preceding five (5) years. Landlord's Broker and Tenant's Broker shall name a third broker, similarly qualified, within five (5) days after appointment of Landlord's Broker. Landlord's Broker and Tenant's Broker shall each determine the Fair Market Rent for the Premises as of the commencement of the Extended Term for a term equal to the Extended Term within fifteen (15) days after the appointment of the third broker. The Monthly Base Rent payable by Tenant effective as of the commencement of the Extended Term shall be adjusted to an amount equal to the determination of Fair Market Rent made by either Landlord's Broker or Tenant's Broker that the third broker finds to be closer to the Fair Market Rent.

(iii) Landlord shall pay the costs and fees of Landlord's Broker in connection with any determination hereunder, and Tenant shall pay the costs and fees of Tenant's Broker in connection with such determination. The costs and fees of any third broker shall be paid one-half by Landlord and one-half by Tenant.

(4) If the amount of the Fair Market Rent is not known as of the commencement of the Extended Term, then Tenant shall continue to pay the Monthly Base Rent for the Premises in effect at the expiration of the Extended Term until the amount of the Fair Market Rent is determined. When such determination is made, Tenant shall pay any deficiency to Landlord upon demand.

(5) In connection with the extension of the Term pursuant to Tenant's exercise of the Extension Option, the parties acknowledge and agree that Landlord shall not be responsible for the payment to any real estate broker, salesperson or finder claiming to have represented Tenant of any commission, finder's fee or other compensation in connection with or as a consequence of Tenant's exercise of the Extension Option.

(6) Notwithstanding anything to the contrary contained herein, except with respect to a Permitted Transferee, Tenant's rights under this Section 2.2(b) are personal to Named Tenant and shall not be assigned or assignable, in whole or in part, to any third party other than a Permitted Transferee. Any assignment or other transfer of such rights by Named Tenant in violation of the preceding sentence shall be void and of no force or effect. Without limiting the generality of the foregoing, no sublessee of the Premises shall be permitted to exercise the rights granted to Tenant under this Section 2.2(b).

2.3 FAILURE TO DELIVER POSSESSION

If Suite 120 is not delivered to Tenant with the Landlord Work Substantially Completed by the Commencement Date for any reason, Landlord shall not be liable for any claims, damages or liabilities by reason thereof, nor affect the validity of this Lease or the obligations of Tenant hereunder; provided, however, the Commencement Date as to Suite 120 only shall be adjusted to reflect the actual delivery date, and Landlord and Tenant shall enter into a commercially reasonable form of memorandum to memorialize the Commencement Date as to Suite 120 only, and the Commencement Date as to the balance of the Premises shall remain as set forth in the Basic Lease Information. Notwithstanding the foregoing to the contrary, if Landlord is unable to so deliver Suite 120 by the date (the "Outside Suite 120 Delivery Date") that is ninety (90) days after the Commencement Date (which Outside Suite 120 Delivery Date shall be subject to extension day- for-day for Force Majeure events), then Tenant may, at its option, by notice in writing (the "Suite 120 Termination Notice") within thirty (30) days after the Outside Suite 120 Delivery Date cancel this Lease as to Suite 120 only, in which event Landlord and Tenant shall be discharged from all obligations hereunder relating to Suite 120, and Landlord shall return to Tenant any prepaid rent relating to Suite 120 and the Additional Security Deposit, and both parties shall be released from all obligations under this Lease relating to Suite 120 (excepting only those obligations, such as indemnification and defense obligations, which are expressly intended to survive the termination of this Lease). If the Termination Notice is not received by Landlord within said thirty (30) day period, Tenant's right to cancel as to Suite 120 shall terminate. The remedy set forth above shall be Tenant's sole remedy in the event of a delay in delivering possession of Suite 120 to Tenant. In no event shall Landlord be liable for special or consequential damages as a result of any such delay, and no such termination shall modify Tenant's obligations under this Lease as to the balance of the Premises.

2.4 CONDITION OF PREMISES

Landlord shall deliver possession of Suite 120 to Tenant with the Landlord Work Substantially Completed, in vacant, broom clean condition, with all Building systems in good working order, and free of all tenancies and other occupancy rights other than Tenant's pursuant to this Lease. Tenant shall notify Landlord in writing within thirty (30) days after the Commencement Date of any defects in Suite 120 claimed by Tenant or in the materials or workmanship furnished by Landlord in completing the Landlord Work, if any (the "Suite 120 Patent Defect Notice"). Tenant is not waiving its right to have Landlord repair any latent defects that may exist (if any) in Suite 120, and Landlord shall have the obligation (as Tenant's sole remedy) to repair such latent defects, if any, which are discovered by Tenant and reported to Landlord in writing within ninety (90) days after the Commencement Date (the "Suite 120 Latent Defect Notice" and collectively with the Suite 120 Patent Defect Notice, the "Suite 120 Defect Notices"). As specified in Section 2.l above, Tenant currently leases the Premises (other than Suite 120) pursuant to the terms of the Existing Lease. Therefore, except for defects stated in the Suite 120 Defect Notices, and subject to any representations, warranties or covenants of Landlord expressly set forth in this Lease, Tenant shall be conclusively deemed to have (a) accepted the Premises "AS IS" in the condition existing on (i) the date of this Lease, as to all of the Premises other than Suite 120, and (ii) as of the date Tenant first takes possession of Suite 120, as to Suite 120, and (b) waived all claims relating to the condition of the Premises. Landlord shall proceed diligently to correct the defects stated in the Suite 120 Defect Notices unless Landlord disputes the existence of any such defects. In the event of any dispute as to the existence of any such defects, the good faith decision of Landlord's architect shall be final and binding on the parties. No agreement of Landlord to alter, remodel, decorate, clean or improve the Premises or the Real Property and no representation regarding the condition of the Premises or the Real Property has been made by or on behalf of Landlord to Tenant, except as may be specifically stated in this Lease or in the Workletter. Nothing in this Section 2.4 shall be deemed to relieve Landlord from any of its duties or obligations expressly set forth in this Lease or the Workletter.

2.5 PARKING

During the Term, Tenant may use the number of spaces specified in Section 1.1(12) for parking at the rates specified in Section 1.1(12). In the event Tenant fails at any time to pay the full amount of such parking charges, until the delinquent amount is paid Tenant's parking rights may be reduced to the extent of Tenant's failure to pay for any such parking. The locations and type of parking (including, without limitation, valet parking, if any) shall be designated by Landlord or Landlord's parking operator from time to time. All of the spaces shall be unreserved spaces (other than the Building Spaces) and shall be located within the Aquatic Park Center in either parking lots or structured parking garages (other than the Building Spaces). Tenant acknowledges and agrees that the parking spaces serving the Project may include tandem or valet parking and a mixture of spaces for compact vehicles as well as full-size passenger automobiles, and that Tenant shall not use parking spaces for vehicles larger than the striped size of the parking spaces. All vehicles utilizing Tenant's parking spaces shall prominently display identification stickers or other markers, and/or have passes or keycards for ingress and egress, as may be required and provided by Landlord or its parking operator from time to time. Tenant shall comply with any and all parking rules and regulations from time to time established by Landlord or Landlord's parking operator, including a requirement that Tenant pay to Landlord or Landlord's parking operator a charge for loss and replacement of passes, keycards, identification stickers or markers, and for any and all loss or other damage caused by persons or vehicles related to use of Tenant's parking spaces. Tenant shall not allow any vehicles using Tenant's parking spaces to be parked, loaded or unloaded except in accordance with this Section, including in the areas and in the manner designated by Landlord or its parking operator for such activities. If any vehicle is using the parking or loading areas contrary to any provision of this Section, Landlord or its parking operator shall have the right, in addition to all other rights and remedies of Landlord under this Lease, to remove or tow away the vehicle without prior notice to Tenant, and the cost thereof shall be paid to Landlord within ten (I 0) days after notice from Landlord.

To the extent Landlord continues to have such technology available in the Common Areas, Landlord shall keep all EV charging stations located in the parking areas that serve the Premises as of the Commencement Date in good condition, repair and working order throughout the Tenn. The cost of all such maintenance and repair shall be included in Operating Expenses.

ARTICLE 3
RENT

From and after the Commencement Date, Tenant shall pay to Landlord at the address specified in Section 1.1(2), or to such other persons, or at such other places designated by Landlord, without any prior demand therefor in immediately available funds and without any deduction or offset whatsoever (except as expressly provided herein), Rent, including Monthly Base Rent and Rent Adjustments in accordance with Article 4, during the Term. Monthly Base Rent shall be paid monthly in advance on or prior to the first day of each month of the Term, except that the first installment of Monthly Base Rent shall be paid by Tenant to Landlord concurrently with Tenant's execution of this Lease. Monthly Base Rent shall be prorated for partial months within the Term. Tenant's covenant to pay Rent shall be independent of every other covenant in this Lease.

ARTICLE 4
RENT ADJUSTMENTS AND PAYMENTS

4.1 RENT ADJUSTMENTS

(a) From and after the Commencement Date until the Termination Date, Tenant shall pay to Landlord Rent Adjustments with respect to each calendar year (or partial calendar year in the case of the year in which the Commencement Date and the Termination Date occur) as follows:

(1) The Rent Adjustment Deposit representing Tenant's Share of Operating Expenses for the applicable calendar year (or partial calendar year), monthly during the Term with the payment of Monthly Base Rent;

(2) The Rent Adjustment Deposit representing Tenant's Share of Taxes for the applicable calendar year (or partial calendar year), monthly during the Term with the payment of Monthly Base Rent; and

(3) Any Rent Adjustments due in excess of the Rent Adjustment Deposits in accordance with Section 4.2. Rent Adjustments due from Tenant to Landlord for any calendar year (or partial calendar year) shall be Tenant's Share of Operating Expenses for such calendar year (or partial calendar year) and Tenant's Share of Taxes for such calendar year (or partial calendar year).

(b) On or before the beginning of each calendar year or with Landlord's Statement (as defined in Section 4.2 below), Landlord may estimate and notify Tenant in writing of its estimate of the amount of Operating Expenses and Taxes payable by Tenant for such calendar year. Prior to the first determination by Landlord of the amount of Operating Expenses and Taxes for the first calendar year, Landlord may estimate such amounts in the foregoing calculation. Landlord shall have the right from time to time but not more than once during any calendar year to provide a new or revised estimate of Operating Expenses and/or Taxes and to notify Tenant in writing thereof, of corresponding adjustments in Tenant's Rent Adjustment Deposit payable over the remainder of such year, and of the amount or revised amount due allocable to months preceding such change. The last estimate by Landlord shall remain in effect as the applicable Rent Adjustment Deposit unless and until Landlord notifies Tenant in writing of a change, which notice may be given by Landlord from time to time but not more than once during any calendar year throughout the Term.

(c) For purposes of determining Rent Adjustments, if the Building or Property is not fully occupied during all or a portion of any calendar year during the Term, Landlord shall make appropriate adjustments to the variable components of Operating Expenses for such calendar year (or partial calendar year), employing sound accounting and management principles consistently applied, to determine the amount of Operating Expenses that would have been paid or incurred by Landlord had the Building been one hundred percent (I 00%) occupied, and the amount so determined shall be deemed to have been the amount of Operating Expenses for such calendar year (or partial calendar year). In the event that the Property is not fully assessed for all or a portion of any calendar year (or partial calendar year) during the Term, then Taxes shall be adjusted to an amount which would have been payable in such calendar year (or partial calendar year) if the Property had been fully assessed. In addition, Landlord shall have the right, at its sole discretion, from time to time, to equitably allocate certain Operating Expenses among only certain tenants of the Project as to any expense or cost that relates to a repair, replacement or service that benefits only those tenants, and the Rent Adjustments shall reflect any such allocations.

4.2 STATEMENT OF LANDLORD

As soon as practical after the expiration of each calendar year, Landlord will furnish Tenant with a statement respecting the prior calendar year ("Landlord's Statement") showing the following:

(a) The amount of actual Operating Expenses and Taxes for such calendar year;

(b) The amount of Rent Adjustments due Landlord for the last calendar year, less credit for Rent Adjustment Deposits paid, if any; and

(c) Any change in the Rent Adjustment Deposit due monthly in the current calendar year, including the amount or revised amount due for months preceding any such change pursuant to Landlord's Statement.

Tenant shall pay to Landlord within ten (10) days after receipt of such statement any amounts for Rent Adjustments then due in accordance with Landlord's Statement. Any amounts due from Landlord to Tenant pursuant to this Section shall be credited to the Rent Adjustment Deposit next corning due, or promptly refunded to Tenant if the Term has already expired or terminated, provided Tenant is not in Default hereunder. No interest or penalties shall accrue on any amounts that Landlord is obligated to credit or refund to Tenant by reason of this Section 4.2. Landlord's failure to deliver Landlord's Statement or to compute the amount of the Rent Adjustments shall not constitute a waiver by Landlord of its right to deliver such items nor constitute a waiver or release of Tenant's obligations to pay such amounts, unless Landlord fails to deliver such Landlord's Statement as to Operating Expenses or Taxes (unless such delivery delay as to Taxes is due to a delay in the taxing authority providing updated Tax information) within twenty-four (24) months following the conclusion of the applicable calendar year. The Rent Adjustment Deposit shall be credited against Rent Adjustments due for the applicable calendar year (or partial calendar year). During the last complete calendar year or during any partial calendar year in which this Lease expires or terminates, Landlord may include in the Rent Adjustment Deposit its estimate of Rent Adjustments which might not be finally determined until after the expiration or termination of this Lease. Tenant's obligation to pay Rent Adjustments survives the expiration or termination of this Lease.

4.3 BOOKS AND RECORDS

Landlord shall maintain books and records showing Operating Expenses and Taxes in accordance with sound accounting and management practices, consistently applied. Tenant or its representative (which representative shall be a certified public accountant licensed to do business in the state in which the Property is located and whose primary business is certified public accounting and who shall not be paid on a contingency basis) shall have the right, for a period of sixty (60) days following the date upon which Landlord's Statement is delivered to Tenant, to examine Landlord's books and records with respect to the items in the foregoing statement of Operating Expenses and Taxes during normal business hours, upon written notice, delivered at least three (3) Business Days in advance. Tenant shall pay for all costs of such examination, provided, however, if the examination reveals an overcharge of five percent (5%) or more, then Landlord shall pay for all reasonable and actual third-party costs of such examination, up to a maximum amount of the lesser of the amount of the overcharge or Five Thousand Dollars ($5,000.00). If Tenant performs such examination, but does not object in writing to Landlord's Statement within ninety (90) days after Tenant's receipt thereof, specifying the nature of the item in dispute and the reasons therefor, then Landlord's Statement shall be considered final and accepted by Tenant and Tenant shall be deemed to have waived its right to dispute Landlord's Statement. If Tenant does dispute any Landlord's Statement, Tenant shall deliver a copy of any such audit to Landlord at the time of notification of the dispute. If Tenant does not provide such notice of dispute and a copy of such audit to Landlord within such ninety (90) day period, it shall be deemed to have waived such right to dispute Landlord's Statement. Any amount due to Landlord as shown on Landlord's Statement, whether or not disputed by Tenant as provided herein shall be paid by Tenant when due as provided above, without prejudice to any such written exception. In no event shall Tenant be permitted to examine Landlord's records or to dispute any

statement of Operating Expenses and Taxes unless Tenant has paid and continues to pay all Rent when due. Upon resolution of any dispute with respect to Operating Expenses and Taxes, Tenant shall either pay Landlord any shortfall or Landlord shall credit Tenant with respect to any overages paid by Tenant within thirty (30) days after such determination. The records obtained by Tenant shall be treated as confidential and neither Tenant nor any of its representatives or agents shall disclose or discuss the information set forth in the audit to or with any other person or entity except (a) to or with Tenant's directors, officers, attorneys, accountants, auditors, financial advisors, investors, employees and consultants; or (b) as required by Law or legal process (the "Confidentiality Requirement"). Tenant shall indemnify and hold Landlord harmless for any losses or damages arising out of the breach of the Confidentiality Requirement.

4.4 TENANT OR LEASE SPECIFIC TAXES

In addition to Monthly Base Rent, Rent Adjustments, Rent Adjustment Deposits and other charges to be paid by Tenant, Tenant shall pay to Landlord, upon demand, any and all taxes payable by Landlord (other than Excluded Taxes), whether or not now customary or within the contemplation of the parties hereto: (a) upon, allocable to, or measured by the Rent payable hereunder, including any gross receipts tax or excise tax levied by any governmental or taxing body with respect to the receipt of such Rent; or (b) upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion thereof; or (c) upon the measured value of Tenant's personal property located in the Premises or in any storeroom or any other place in the Premises or the Property, or the areas used in connection with the operation of the Property, it being the intention of Landlord and Tenant that, to the extent possible, such personal property taxes shall be billed to and paid directly by Tenant; (d) resulting from any Tenant Work or Tenant Alterations, whether title thereto is in Landlord or Tenant; or (e) upon this transaction. Taxes or supplemental taxes paid by Tenant pursuant to this Section 4.4 shall not be included in any computation of Taxes payable pursuant to Sections 4.1 and 4.2, but the standard property management fees shall apply to any such payments.

ARTICLE 5
SECURITY

(a) Simultaneously with Tenant's execution and delivery of this Lease to Landlord, Tenant shall pay Landlord in immediately available funds the cash amount of the Additional Security Deposit set forth in Section l. l(l 0) of this Lease, which Additional Security Deposit, plus the amount held under the Existing Lease (as set forth in Section 1.1(10)), Landlord shall hold under this Lease for the full and faithful performance by Tenant of each and every term, provision, covenant, and condition of this Lease. If Tenant fails to perform any of the terms, provisions, covenants and conditions of this Lease or any other document executed by Tenant in connection with this Lease beyond any applicable notice or cure period, then Landlord may use, apply, or retain the whole or any part of the Security Deposit for the payment of any Rent not paid when due, for the cost of repairing any damage, for the cost of cleaning the Premises, for the payment of any other sum which Landlord may expend or may be required to expend by reason of Tenant's failure to perform, and otherwise for compensation of Landlord for any other loss or damage to Landlord occasioned by Tenant's failure to perform, including, but not limited to, any loss of future Rent and any damage or deficiency in the reletting of the Premises (whether such loss, damages or deficiency accrue before or after summary proceedings or other reentry by Landlord) and the amount of the unpaid past Rent, future Rent loss, and all other losses, costs and damages, that Landlord would be entitled to recover if Landlord were to pursue recovery under Section 1 1.2(b) or (c) of this Lease or California Civil Code Section 1951.2 or 1951.4 (and any supplements, amendments, replacements and substitutions thereof and therefor from time to time). If Landlord so uses, applies or retains all or part of the Security Deposit, Tenant shall within five (5) Business Days after demand pay or deliver to Landlord in immediately available funds the sum necessary to replace the amount used, applied or retained. The Security Deposit (except any amount retained for application by Landlord as provided herein) shall be returned to Tenant within thirty (30) days after the later of: (i) the Termination Date or (ii) recovery of possession of the Premises by Landlord; provided, however, in no event shall any such return be construed as an admission by Landlord that Tenant has performed all of its obligations hereunder.

(b) The Security Deposit shall not be deemed an advance rent deposit or an advance payment of any kind, or a measure of Landlord's damages with respect to Tenant's failure to perform, nor shall any action or inaction of Landlord with respect to it or its use or application be a waiver of, or bar or defense to, enforcement of any right or remedy of Landlord. Landlord shall not be required to keep the Security Deposit separate from its general funds and shall not have any fiduciary duties or other duties (except as set forth in this Section) concerning the Security Deposit. Tenant shall not be entitled to any interest on the Security Deposit. In the event of any sale or other transfer of Landlord's interest in the Building, Landlord shall have the right to transfer the Security Deposit, or balance thereof, to the transferee and any such transfer shall release Landlord from all liability for the return of the Security Deposit if the Security Deposit is actually transferred to the purchaser of Landlord's interest in the Building and such purchaser assumes Landlord's obligations under this Article 5. Tenant thereafter shall look solely to such transferee for the return or payment of the Security Deposit. Tenant shall not assign or encumber or attempt to assign or encumber the Security Deposit or any interest in it and Landlord shall not be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance, and regardless of one or more assignments of this Lease, Landlord may return the Security Deposit to the original Tenant without liability to any assignee. Tenant hereby waives any and all rights of Tenant under the provisions of Section 1950.7 of the California Civil Code, and any and all rights of Tenant under all provisions of Law, now or hereafter enacted, regarding security deposits.

ARTICLE 6
SERVICES

6.1 LANDLORD'S GENERAL SERVICES

(a) Landlord shall furnish the following services the cost of which services shall be included in Operating Expenses or paid directly by Tenant to the utility or service provider:

(1) heat, ventilation and air-conditioning ("HVAC") in the Premises during Standard Operating Hours as necessary in Landlord's reasonable judgment for the comfortable occupancy of the Premises under normal business office and laboratory operations, and outside of Standard Operating Hours, HVAC shall be set to minimum safe setback levels for laboratory operations, subject to compliance with all applicable voluntary and mandatory regulations and **Lav.rs;**

(2) tempered and cold water for normal and customary use in the Premises and in lavatories in common with other tenants from the regular supply of the Building;

(3) customary cleaning and janitorial services in the Common Areas five (5) days per week, excluding National Holidays; and

(4) washing of the outside windows in the Premises weather permitting at intervals determined by Landlord.

(b) Landlord shall provide a security program for the Building (but not individually for Tenant or the Premises), the cost of which program shall be an Operating Expense. Landlord shall not be liable in any manner to Tenant or any other Tenant Parties for any acts (including criminal acts) of others, or for any direct, indirect, or consequential damages, or any injury or damage to, or interference with, Tenant's business, including, but not limited to, loss of profits, loss of rents or other revenues, loss of business opportunity, loss of goodwill or loss of use, or other loss or damage, bodily injury or death, related to any malfunction, circumvention or other failure of any security program, or for the failure of any security program to prevent bodily injury, death, or property damage, or loss, or to apprehend any person suspected of causing such injury, death, damage or loss.

(c) If Tenant uses heat generating machines or equipment in the Premises to an extent which adversely affects the temperature otherwise maintained by the air-cooling system or whenever the occupancy or electrical load adversely affects the temperature otherwise maintained by the air-cooling system, Landlord reserves the right to install or to require Tenant to install supplementary air-conditioning units in the Premises. Tenant shall bear all costs and expenses related to the installation, maintenance and operation of such units.

(d) Tenant shall pay Landlord at rates fixed by Landlord for all tenants in the Building, charges for all water furnished to the Premises beyond that described in Section 6.1(a)(2) (if any), including the expenses of installation of a water line, meter and fixtures.

(e) Commencing on the Commencement Date and throughout the remainder of the Term, Tenant shall continue to have the exclusive right to connect to Landlord's generator located in the East Lot (the "Generator"), which Generator is solely for the purpose of providing emergency electrical capacity to the Premises, subject to the following terms and conditions:

(1) Tenant's access to the Generator shall be limited to such times, rules and regulations as Landlord may reasonably impose. Tenant shall be solely responsible for obtaining all necessary governmental and regulatory approvals, if any, required in order for Tenant to connect to the Generator. Tenant shall install a submeter, at Tenant's cost, to measure the electricity consumed by Tenant in connection with Tenant's use of the Generator. Tenant's use of the Tenant's use of the Generator is not guaranteed and Landlord shall not be in default of this Lease in the event Tenant is unable to use the Generator.

(2) Landlord shall repair and maintain the Generator, and Tenant shall pay one hundred percent (100%) of the cost of such repair and maintenance. All such costs shall be deemed Rent under the Lease and shall be payable upon demand.

(3) Tenant hereby agrees that Tenant's connection to the Generator and its use of the Generator is at Tenant's sole risk, and Tenant hereby agrees that Landlord and the Indemnitees shall not be liable for, and Tenant hereby waives and releases all claims for loss or damage to Tenant's business or damage to person or property sustained by Tenant or any person claiming by, through or under Tenant, including Tenant's principals, agents, contactors and employees, resulting from Tenant's use of the Generator or connection to same, the failure of the Generator to operate properly, or the interruption or cessation of electrical service from the Generator.

(4) Landlord may revoke Tenant's right to connect to and use the Generator as granted herein if Landlord determines, in its sole discretion, that (i) Tenant's use of the Generator exceeds the capacity of the Generator, or (ii) Tenant is failing to perform its obligations with respect to the Generator, as described in this Section 6.1(e), in a timely manner. Such revocation shall be by written notice and, upon receipt of such notice, Tenant shall have thirty (30) days to remedy the issue(s) stated in Landlord's written notice. In the event the Tenant cannot remedy such issue(s) within such 30-day period, Landlord, at Tenant's sole cost and expense, shall disconnect the Generator infrastructure servicing the Premises.

6.2 UTILITIES AND JANITORIAL SERVICES

All utility services used in the production of heating and cooling and air supply and exhaust from the central HVAC systems serving the Building and Premises, including, without limitation, electricity and gas, as well as water and sewer services, shall constitute Operating Expenses on the terms provided in the definition of Operating Expenses set forth above. All utility services used by Tenant within the Premises, including, without limitation, electricity and gas, shall be paid for by Tenant either through a separate charge or as part of Operating Expenses. Such charges shall be based upon Tenant's usage, which usage: (a) as to electricity, other than overhead lighting, shall be measured by a separate meter or sub-meter to be installed as part of the Tenant Work, and paid by Tenant within fifteen (15) days after billing as additional Rent under this Lease; and (b) as to all other utilities, shall either be reasonably estimated by Landlord and paid by Tenant within fifteen (15) days after billing as additional Rent under this Lease or included in Operating Expenses. In addition, Tenant shall provide its own janitorial services to the Premises, using a janitorial service reasonably acceptable to Landlord or shall make arrangements with Landlord for Landlord, through Landlord's vendors, to perform such Premises cleaning services, and shall pay the costs thereof directly to Landlord. Notwithstanding any provision of this Lease to the contrary, Tenant shall not make any alterations or additions to the electric equipment or systems in the Premises, in each instance, without the prior written approval of Landlord, which approval shall not be unreasonably withheld, conditioned or delayed so long as such alterations or additions (i) do not exceed the capacity of the wiring, feeders and risers in the Premises and (ii) are in compliance with the City's building code. Tenant's use of electric current shall at no time exceed the capacity of the wiring, feeders and risers providing electric current to the Premises or the Building. The consent of Landlord to the installation of electric equipment shall not relieve Tenant from the obligation to limit usage of electricity to no more than such capacity.

6.3 ADDITIONAL AND AFTER HOUR SERVICES

At Tenant's written request, Landlord shall furnish additional quantities of any of the services or utilities specified in Section 6.1, if Landlord can reasonably do so, on the terms set forth herein. For services or utilities requested by Tenant and furnished by Landlord, Tenant shall pay to Landlord as a charge therefor Landlord's prevailing rates charged from time to time for such services and utilities, as additional Rent under this Lease. Without limiting the generality of the foregoing, for HVAC service outside of Standard Operating Hours, Landlord's prevailing rate as of the date of this Lease includes a one (I) hour minimum per activation. If Tenant shall fail to make any such payment, Landlord may, upon notice to Tenant and in addition to Landlord's other remedies under this Lease, discontinue any or all of such additional services.

6.4 TELEPHONE SERVICES

All telephone and communication connections which Tenant may desire shall be subject to Landlord's prior written approval, in Landlord's reasonable discretion, and the location of all Cables and the work in connection therewith shall be performed by contractors approved by Landlord and shall be subject to the direction of Landlord, except that such approval is not required as to Tenant's telephone equipment (including Cables) within the Premises and from the Premises in a route designated by Landlord to any telephone cabinet or panel provided (as existing) on Tenant's floor for Tenant's connection to the Cables serving the Building so long as Tenant's equipment does not require connections different than or additional to those to the telephone cabinet or panel provided. Except to the extent of such Cables within the Premises or from the Premises to such telephone cabinet or panel, Landlord reserves the right to designate and control the entity or entities providing Cable installation, removal, repair and maintenance in the Building and to restrict and control access to telephone cabinets or panels. In the event Landlord designates a particular vendor or vendors to provide such Cable installation, removal, repair and maintenance for the Building, Tenant agrees to abide by and participate in such program. Tenant shall be responsible for and shall pay, as additional Rent under this Lease, all costs incurred in connection with the installation of Cables in the Premises, including any hook-up, access and maintenance fees related to the installation of such Cables in the Premises and the commencement of service therein, and the maintenance thereafter of such Cables; and there shall be included in Operating Expenses for the Building all installation, removal, hook-up or maintenance costs incurred by Landlord in connection with Cables serving the Building which are not allocable to any individual users of such service but are allocable to the Building generally. If Tenant fails to maintain all Cables in the Premises and such failure affects or interferes with the operation or maintenance of any other Cables serving the Building, Landlord or any vendor hired by Landlord may enter into and upon the Premises forthwith and perform such repairs, restorations or alterations as Landlord deems necessary in order to eliminate any such interference (and Landlord may recover from Tenant all of Landlord's costs in connection therewith). If required by Landlord, no later than the Termination Date Tenant shall remove all Cables installed by Tenant for and during Tenant's occupancy. Tenant agrees that neither Landlord nor any of its agents or employees shall be liable to Tenant, or any of Tenant's employees, agents, customers or invitees or anyone claiming through, by or under Tenant, for any damages, injuries, losses, expenses, claims or causes of action because of any interruption, diminution, delay or discontinuance at any time for any reason in the furnishing of any telephone or other communication service to the Premises and the Building.

6.5 DELAYS IN FURNISHING SERVICES

Tenant agrees that Landlord shall not be in breach of this Lease nor be liable to Tenant for damages or otherwise, for any failure to furnish, or a delay in furnishing, or a change in the quantity or character of any service when such failure, delay or change is occasioned, in whole or in part, by repairs, improvements or mechanical breakdowns, by the act or default of Tenant or other parties or by an event of Force Majeure. No such failure, delay or change shall be deemed to be an eviction or disturbance of Tenant's use and possession of the Premises, or relieve Tenant from paying Rent or from performing any other obligations of Tenant under this Lease, without any deduction or offset, except as otherwise provided in this Section 6.5. Failure to any extent to make available, or any slowdown, stoppage, or interruption of, the specified utility services resulting from any cause, including changes in service provider or Landlord's compliance with any voluntary or similar governmental or business guidelines now or hereafter published or any requirements now or hereafter established by any governmental agency, board, or bureau having jurisdiction over the operation of the Property, shall not render Landlord liable in any respect for damages to either persons, property, or business, nor be construed as an eviction of Tenant or work an abatement of Rent, nor relieve Tenant of Tenant's obligations for fulfillment of any covenant or agreement hereof. Should any equipment or machinery furnished by Landlord break down or for any cause cease to function properly, Landlord shall use reasonable diligence to repair same promptly, but Tenant shall have no claim for abatement of Rent or damages on

account of any interruption of service occasioned thereby or resulting therefrom. Notwithstanding anything to the contrary in the foregoing, if Tenant is unable to use the Premises as a result of an interruption in service, and if any such interruption (i) continues for five (5) consecutive Business Days following Tenant's delivery to Landlord of notice of such interruption, (ii) is caused by the negligence of Landlord or any of its agents, employees, contractors, vendors or licensees, and the cure of same is within the reasonable control of Landlord (and is not attributable to any acts or omissions of Tenant or any third party or to Force Majeure), (iii) materially and adversely affects Tenant's ability to conduct business in the Premises, or any material portion thereof, and (iv) on account of such interruption Tenant ceases doing business in the Premises, Rent shall thereafter abate to the extent the Premises are rendered unusable and are actually not used by Tenant as a result thereof, commencing on the sixth (6th) Business Day following Tenant's notice hereunder and continuing for the remainder of the interruption. Tenant hereby waives any benefits of any applicable existing or future Law, including the provisions of California Civil Code section 1932(1), permitting the termination of this Lease due to such interruption, failure or inability.

6.6 CHOICE OF SERVICE PROVIDER

Tenant acknowledges that Landlord may, at Landlord's sole option, to the extent permitted by applicable Law, elect to change, from time to time, the company or companies which provide services (including electrical service, gas service, water, telephone and technical services) to the Building, the Premises and/or its occupants. Notwithstanding anything to the contrary set forth in this Lease, Tenant acknowledges that Landlord has not and does not make any representations or warranties concerning the identity or identities of the company or companies which provide services to the Building and the Premises or its occupants, and Tenant acknowledges that the choice of service providers and matters concerning the engagement and termination thereof shall be solely that of Landlord. The foregoing provision is not intended to modify, amend, change or otherwise derogate any provision of this Lease concerning the nature or type of service to be provided or any specific information concerning the amount thereof to be provided. Tenant agrees to cooperate with Landlord and each of its service providers in connection with any change in service or provider.

6.7 SIGNAGE

(a) Standard Signage. Initial Building standard signage for Tenant will be installed by Landlord in the directory in the main lobby of the Building and, in the case of any multi-tenant floor, in the listing of tenants in the lobby for the floor on which the Premises is located and at Tenant's main entry door to the Premises, all at Tenant's sole cost and expense. Any change in such initial signage shall be only with Landlord's prior written consent, shall conform to Building standard signage and shall be at Tenant's sole cost and expense.

(b) Exterior Signs. In addition to the signage identified in Section 6.7(a) above, Tenant shall, in accordance with the Aquatic Park Center Campus signage program (the "Aquatic Park Center Campus Signage Program"), continue to have the exclusive right to keep and maintain a sign panel displaying Tenant's trade name on the monument sign located at the southeast corner of the Project (i.e., Ninth and Potter) (the "Exclusive Monument Sign") and the non-exclusive right to keep and maintain a sign panel displaying Tenant's trade name on the monument signs located at Seventh and Potter and Seventh and Anthony, respectively (the "Non-Exclusive Monument Sign", and collectively with the Exclusive Monument Sign, the "Monument Signs"). Landlord shall have no obligation to Tenant with respect to the adequacy or condition of the existing Monument Sign structures except ordinary repairs and maintenance of the structure containing the Non-Exclusive Monument Sign, and Landlord has not made any warranty or representation of any kind to Tenant regarding the condition of the existing Monument Sign structures. Notwithstanding anything to the contrary contained in this Lease, and in addition to the maintenance and repair obligations of Tenant set forth in Section 8.2 of this Lease, any and all maintenance and repair relating to Tenant's sign panels on the Monument Signs, and the structure containing the Exclusive Monument Sign (including, without limitation, upgrading such structure to conform to the Aquatic Park Center Campus Signage Program), shall be the sole responsibility of Tenant and at Tenant's sole cost. Notwithstanding anything to the contrary contained herein, Tenant's rights under this Section 6.7 are personal to the Named Tenant and any Permitted Transferee and shall not be assigned or assignable, in whole or in part, to any third party other than a Permitted Transferee.

ARTICLE 7
USE OF PREMISES; LANDLORD'S ACCESS RIGHTS

7.1 USE OF PREMISES

(a) Tenant shall occupy and use the Premises only for the uses specified in Section 1.1(11)) to conduct Tenant's business. Tenant shall not occupy or use the Premises (or permit the use or occupancy of the Premises) for any purpose or in any manner which: (I) is unlawful or in violation of any Law or Hazardous Materials Law; (2) is prohibited by the terms and conditions of this Lease or the rules of the Building set forth in Article 18 hereof; (3) would create or continue a nuisance; or (4) in any manner that will cause the Building or any part thereof not to conform with the Project's Sustainability Practices or the certification of the Building's core and shell issued pursuant to the applicable Green Building Standards.

(b) If Tenant requests, Landlord shall provide Tenant with up to twelve (12) additional access card keys (in addition to those possessed by Tenant as of the date of this Lease) the cost of which shall be paid by Tenant within ten (JO) days after Landlord's demand therefor, and Tenant shall place a deposit for such cards with Landlord to cover lost cards or cards which are not returned at the end of the Term (provided that Landlord shall return any deposit to Tenant less any amounts due for unreturned access cards). Landlord shall provide Tenant access to the Premises and parking areas 24 hours per day, 7 days per week and 365/366 days per year through such access card keys.

(c) Landlord and Tenant acknowledge that the Americans With Disabilities Act of 1990 (42 U.S.C. §12101 et seq.) and regulations and guidelines promulgated thereunder, as all of the same may be amended and supplemented from time to time (collectively referred to herein as the "ADA") establish requirements for business operations, accessibility and barrier removal, and that such requirements may or may not apply to the Premises, the Building and the Project depending on, among other things: (I) whether Tenant's business is deemed a "public accommodation" or "commercial facility", (2) whether such requirements are "readily achievable", and (3) whether a given alteration affects a "primary function area" or triggers "path of travel" requirements. The parties hereby agree that: (a) Landlord shall be responsible for ADA Title III compliance in the Common Areas, (b) Tenant shall be responsible for ADA Title III compliance in the Premises, including any Leasehold Improvements or other work to be performed in the Premises under or in connection with this Lease, and (c) Landlord may perform, or require that Tenant perform, and Tenant shall be responsible for the cost of, ADA Title III "path of travel" requirements triggered by Tenant Additions in the Premises. Tenant shall be solely responsible for requirements under Title I of the ADA relating to Tenant's employees.

(d) Landlord and Tenant agree to cooperate and use commercially reasonable efforts, at no cost or expense to Tenant (other than through inclusion in Operating Expenses), to participate in traffic management programs generally applicable to businesses located in the City of Berkeley and Tenant shall encourage and support van, shuttle service, and carpooling by, and staggered and flexible working hours for, its office workers and service employees to the extent determined by Tenant in its sole discretion. Neither this Section or any other provision of this Lease is intended to or shall create any rights or benefits in any other person, firm, company, governmental entity or the public.

(e) Tenant agrees to reasonably cooperate with Landlord and lo comply at no material cost to Tenant with any and all guidelines or controls concerning energy management and usage disclosure imposed upon Landlord by federal or state governmental organizations or by any energy conservation association to which Landlord is a party or which is applicable to the Building, including, without limitation, the requirements of California's Nonresidential Building Energy Use Disclosure Program, as more particularly specified in California Public Resources Code Sections 25402.10 et seq. and regulations adopted pursuant thereto. Further, Tenant hereby authorizes (and agrees that Landlord shall have the authority to authorize) any electric or gas utility company providing service to the Building to disclose from time to time so much of the data collected and maintained by it regarding Tenant's energy consumption data as may be necessary to cause the Building to participate in the ENERGY STAR® Portfolio Manager system and similar programs; and Tenant further authorizes Landlord to disclose information concerning energy use by Tenant, either individually or in combination with the energy use of other tenants, as applicable as Landlord determines to be necessary to comply with applicable Laws pertaining to the Building or Landlord's ownership thereof.

(f) Hazardous Materials.

(1) Definitions. The following terms shall have the following meanings for purposes of this Lease:

(i) “Biohazardous Materials” means any and all substances and materials defined or referred to as “medical waste,” “biological waste,” “biohazardous waste,” “biohazardous material” or any other term of similar import under any Hazardous Materials Laws, including (but not limited to) California Health & Safety Code Sections 25105 et seq., and any regulations promulgated thereunder, as amended from time to time.

(ii) “Chemical Control Area Plan” means that certain plan for the use and storage of Hazardous Materials in the Building created by Landlord and approved by the City, if any.

(iii) “Environmental Condition” means the Release of any Hazardous Materials in, over, on, under, through, from or about the Project (including, but not limited to, the Premises).

(iv) “Environmental Damages” means all claims, suits, judgments, damages, losses, penalties, fines, liabilities, encumbrances, liens, costs and expenses of whatever kind or nature, contingent or otherwise, matured or unmatured, foreseeable or unforeseeable, arising out of or in connection with any Environmental Condition, including, to the extent arising out of an Environmental Condition, without limitation: (A) damages for personal injury, or for injury or damage to the Project or natural resources occurring on or off the Project, including without limitation (I) any claims brought by or on behalf of any person, (2) any loss of, lost use of, damage to or diminution in value of any Project or natural resource, and (3) costs of any investigation, remediation, removal, abatement, containment, closure, restoration or monitoring work required by any federal, state or local governmental agency or political subdivision, or otherwise reasonably necessary to protect the public health or safety, whether on or off the Project; (B) reasonable fees incurred for the services of attorneys, consultants, contractors, experts and laboratories in connection with the preparation of any feasibility studies, investigations or reports or the performance of any work described above; (C) any liability to any third person or governmental agency to indemnify such person or agency for costs expended or liabilities incurred in connection with any items described in clause (A) or (B) above; (D) any fair market or fair market rental value of the Project; and (E) the amount of any penalties, damages or costs a party is required to pay or incur in excess of that which the patty otherwise would reasonably have expected to pay or incur absent the existence of the applicable Environmental Condition.

(v) “Handling” or “Handles”, when used with reference to any substance or material, includes (but is not limited to) any receipt, storage, use, generation, Release, transportation, treatment or disposal of such substance or material.

(vi) “Hazardous Materials” means any and all chemical, explosive, biohazardous, radioactive or otherwise toxic or hazardous materials or hazardous wastes, including without limitation any asbestos-containing materials, PCB’s, CFCs, petroleum and derivatives thereof, Radioactive Materials, Biohazardous Materials, Hazardous Wastes, any other substances defined or listed as or meeting the characteristics of a hazardous substance, hazardous material, Hazardous Waste, toxic substance, toxic waste, biohazardous material, biohazardous waste, biological waste, medical waste, radiation, radioactive substance, radioactive waste, or other similar term, as applicable, under any law, statute, ordinance, code, rule, regulation, directive, order, condition or other written requirement enacted, promulgated or issued by any public officer or governmental or quasi-governmental authority, whether now in force or hereafter in force at any time or from time to time to protect the environment or human health, and/or any mixed materials, substances or wastes containing more than one of the foregoing categories of materials, substances or wastes.

(vii) “Hazardous Materials Laws” means, collectively, (A) the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. Sections 9601-9657, (B) the Hazardous Materials Transportation Act of 1975, 49 U.S.C. Sections 1801-1812, (C) the Resource Conservation and Recovery Act of 1976, 42 U.S.C. Sections 6901-6987 (together with any amendments thereto, any regulations thereunder and any amendments to any such regulations as in effect from time to time, “RCRA”), (D) the California Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health & Safety Code Sections 25300 et seq., (E) the Hazardous Materials Release Response Plans and Inventory Act, California Health & Safety Code Sections 25500 et seq., (F) the California Hazardous Waste Control Law, California Health & Safety Code Sections 25100 et seq. (together with any amendments thereto, any regulations thereunder and any amendments to any such regulations as in

effect from time to time, the "CHWCL"), (G) California Health & Safety Code Sections 25015- 25027.8, (H) any amendments to or successor statutes to any of the foregoing, as adopted or enacted from time to time, (I) any regulations or amendments thereto promulgated pursuant to any of the foregoing from time to time, (J) any Laws relating to Biohazardous Materials, including (but not limited to) any regulations or requirements with respect to the shipping, use, decontamination and disposal thereof, and (K) any other Law now or at any time hereafter in effect regulating, relating to or imposing liability or standards of conduct concerning any Hazardous Materials, including (but not limited to) any requirements or conditions imposed pursuant to the terms of any orders, permits, licenses, registrations or operating plans issued or approved by any governmental or quasi-governmental authority from time to time either on a Project-wide basis or in connection with any Handling of Hazardous Materials in, on or about the Premises or the Project.

(viii) "Landlord's Contamination" means any Hazardous Materials which exist in, on, under or in the vicinity of the Project as of the date of this Lease or which migrate onto or beneath the Project after termination of this Lease or at any time after the date of this Lease are, Released on, in or under the Property due to the gross negligence or intentional misconduct of Landlord and/or any of its agents, employees, contractors or vendors. Tenant shall not be required to pay any costs with respect to the remediation or abatement of Landlord's Contamination.

(ix) "Radioactive Materials" means (A) any and all substances and materials the Handling of which requires an approval, consent, permit or license from the Nuclear Regulatory Commission, (B) any and all substances and materials the Handling of which requires a Radioactive Material License or other similar approval, consent, permit or license from the State of California, and (C) any and all other substances and materials defined or referred to as "radiation," a "radioactive material" or "radioactive waste," or any other term of similar import under any Hazardous Materials Laws, including (but not limited to) Title 26, California Code of Regulations Section 17-30100, and any statutes, regulations or other laws administered, enforced or promulgated by the Nuclear Regulatory Commission.

(x) "Release" means any accidental or intentional spilling, leaking, pumping, pouring, emitting, discharging, injecting, escaping, leaching, migrating, dumping or disposing into the air, land, surface water, groundwater or the environment (including without limitation the abandonment or discarding of receptacles containing any Hazardous Materials).

(xi) "Tenant's Contamination" means any Hazardous Material Release on or about the Property by Tenant and/or any agents, employees, contractors, vendors, suppliers, licensees, subtenants, and invitees of Tenant (individually, a "Tenant Party" and collectively, "Tenant Parties").

(2) Handling of Hazardous Materials. The parties acknowledge that Tenant wishes and intends to use all or a portion of the Premises as a bio-pharmaceutical research and development facility and otherwise for the conduct by Tenant of its business in accordance with the use specified in Section 1.1(11) above, that such use, as conducted or proposed to be conducted by Tenant, includes the Handling of Hazardous Materials, and that Tenant shall therefore be permitted to engage in the Handling in the Premises of necessary and reasonable quantities of Hazardous Materials customarily used in or incidental to the operation of a bio-pharmaceutical research, development, preparation and/or dispensing facility and the other business operations of Tenant in the manner conducted or proposed to be conducted by Tenant hereunder ("Permitted Hazardous Materials"), provided that the Handling of such Permitted Hazardous Materials by all Tenant Parties shall at all times comply with and be subject to all provisions of this Lease and all Laws, including all Hazardous Materials Laws, and with Landlord's Chemical Control Area Plan for the Building, if any. Without limiting the generality of the foregoing, Tenant shall comply at all times with all Hazardous Materials Laws applicable to any aspect of Tenant's use of the Premises and the Project and of Tenant's operations and activities in, on and about the Premises and the Project, and shall ensure at all times that Tenant's Handling of Hazardous Materials in, on and about the Premises does not violate (x) the terms of any governmental licenses or permits applicable to the Building (including, but not limited to, the Building Discharge Permit as defined below) or Premises or to Tenant's Handling of any Hazardous Materials therein, or (y) any applicable requirements or restrictions relating to the occupancy classification of the Building and the Premises.

(3) Disposition or Emission of Hazardous Materials. Tenant shall not Release or dispose of any Hazardous Materials, except to the extent authorized by permit, at the Premises or on the Project, but instead shall arrange for off-site disposal, under Tenant's own name and EPA waste generator number (or other similar identifying information issued or prescribed by any other governmental authority with respect to Radioactive Materials, Biohazardous Materials or any other Hazardous Materials) and at Tenant's sole expense, in compliance with all applicable Hazardous Materials Laws, with the Laboratory Rules and Regulations (defined below) and with all other applicable Laws and regulatory requirements.

(4) Information Regarding Hazardous Materials. Tenant shall maintain and make available the following information and/or documentation to Landlord in writing prior to the Commencement Date, and thereafter shall update and deliver to Landlord such information and/or documentation (x) annually, by no later than January 31st of each calendar year, (y) upon any material change in Tenant's Hazardous Materials inventory or in Tenant's business operations involving Hazardous Materials, and (z) at such other times as Landlord may reasonably request in writing from time to time, which updates shall reflect any material changes in such information and/or documentation:

(i) An inventory of all Hazardous Materials that Tenant receives, uses, handles, generates, transports, stores, treats or disposes of from time to time, or at the time of preparation of such inventory proposes or expects to use, handle, generate, transport, store, treat or dispose of from time to time, in connection with its operations at the Premises. Such inventory shall include, but shall separately identify, any Hazardous Wastes, Biohazardous Materials and Radioactive Materials covered by the foregoing description. If such inventory includes any Biohazardous Materials, Tenant shall also disclose in writing to Landlord the Biosafety Level designation associated with the use of such materials.

(ii) Copies of all then existing permits, licenses, registrations and other similar documents issued by any governmental or quasi-governmental authority that authorize any Handling of Hazardous Materials in, on or about the Premises or the Project by any Tenant Party.

(iii) All Material Safety Data Sheets ("MSDSs"), if any, required to be completed with respect to operations of Tenant at the Premises from time to time in accordance with Title 26, California Code of Regulations Section 8-5194 or 42 U.S.C. Section 11021, or any amendments thereto.

(iv) All hazardous waste manifests (as defined in Title 26, California Code of Regulations Section 22-66481), if any, that Tenant is required by Law to complete from time to time in connection with its operations at the Premises.

(v) A copy of any "Hazardous Materials Business Plan" required from time to time with respect to Tenant's operations at the Premises pursuant to California Health & Safety Code Sections 25500 et seq., and any regulations promulgated thereunder, as amended from time to time, or in connection with Tenant's application for a business license from the City. If applicable law does not require Tenant to prepare a Hazardous Materials Business Plan, Tenant shall furnish to Landlord, within sixty (60) days after receipt of Landlord's written request therefor, the information that would customarily be contained in a Hazardous Materials Business Plan, including (but not limited to) information regarding Tenant's Hazardous Materials inventories. The parties acknowledge that a Hazardous Materials Business Plan would ordinarily include an emergency response plan, and that regardless of whether applicable Law requires Tenant or other tenants in the Building to prepare Hazardous Materials Business Plans, Landlord in its discretion may elect to prepare a coordinated emergency response plan for the entire Building and/or for multiple buildings within the Campus (if and to the extent applicable).

(vi) Any "Contingency Plans and Emergency Procedures" required of Tenant from time to time, in connection with its operations at the Premises, pursuant to Title 26, California Code of Regulations Sections 22-67140 et seq., and any amendments thereto, and any "Training Programs and Records" required under Title 26, California Code of Regulations Section 22-66493, and any amendments thereto from time to time. Landlord in its discretion may elect to prepare a Contingency Plan and Emergency Procedures for the entire Building and/or for multiple buildings within the Campus, in which event, if applicable law does not require Tenant to prepare a Contingency Plan and Emergency Procedures for its operations at the Premises, Tenant shall furnish to Landlord, within sixty (60) days after receipt of Landlord's written request therefor, that would customarily be contained in a Contingency Plan and Emergency Procedures.

(vii) Copies of any biennial or other periodic reports furnished or required to be furnished to the California Department of Health Services from time to time pursuant to Title 26, California Code of Regulations Section 22-66493 and any amendments thereto, relating to any Hazardous Materials Handled by Tenant.

(viii) Copies of any industrial wastewater discharge permits issued to or held by Tenant from time to time in connection with its operations at the Premises (the parties presently anticipate, however, that because of the existence of the Building Discharge Permit in Landlord's name as described above, Tenant will not be required to maintain a separate, individual discharge permit).

(ix) Copies of any other lists, reports, studies, or inventories of Hazardous Materials or of any subcategories of materials included in Hazardous Materials that Tenant is otherwise required to prepare and file from time to time with any governmental or quasi- governmental authority in connection with Tenant's operations at the Premises, including (but not limited to) reports filed by Tenant with the federal Food & Drug Administration or any other regulatory authorities primarily in connection with the presence (or lack thereof) of any "select agents" or other Biohazardous Materials on the Premises, together with proof of filing thereof.

(x) Any other information reasonably requested by Landlord in writing from time to time in connection with (A) Landlord's monitoring (in Landlord's reasonable discretion) and enforcement of Tenant's obligations under this Section and of compliance with applicable Laws in connection with any Handling or Release of Hazardous Materials in the Premises or Building or on or about the Project by any Tenant Party, (B) any inspections or enforcement actions by any governmental authority pursuant to any Hazardous Materials Laws or any other Laws relating to the presence or Handling of Hazardous Materials in the Premises or Building or on or about the Project by any Tenant Party, and/or (C) Landlord's preparation (in Landlord's discretion) and enforcement of any reasonable rules and procedures relating to the presence or Handling by Tenant or any Tenant Patty of Hazardous Materials in the Premises or Building or on or about the Project, including (but not limited to) any contingency plans or emergency response plans as described above. Except as otherwise required by Law, Landlord shall keep confidential any information supplied to Landlord by Tenant pursuant to the foregoing, provided, however, that the foregoing shall not apply to any information filed with any governmental authority or available to the public at large. Landlord may provide such information to its lenders, consultants or investors provided such entities agree to keep such information confidential.

(5) Indemnification; Notice of Release. Tenant shall be responsible for and shall indemnify, defend and hold Landlord harmless from and against all Environmental Damages to the extent arising out of or otherwise relating to (i) any Handling of Hazardous Materials by any Tenant Party in, on or about the Premises or the Project in violation of this Section, (ii) any breach of Tenant's obligations under this Section or of any Hazardous Materials Laws by any Tenant Party, or (iii) the existence of any Tenant's Contamination in, on or about the Premises or the Project to the extent caused by any Tenant Patty, including without limitation any removal, cleanup or restoration work and materials necessary to return the Project or any improvements of whatever nature located on the Project to the condition existing prior to the Handling of Hazardous Materials in, on or about the Premises or the Project by any Tenant Party. In the event of any Tenant's Contamination in, on or about the Premises or any other portion of the Project or any adjacent lands, Tenant shall promptly remedy the problem in accordance with all applicable Hazardous Materials Laws, shall give Landlord oral notice of any such non-standard or noncustomer Release promptly after Tenant becomes aware of such Release, followed by written notice to Landlord within five (5) days after Tenant becomes aware of such Release, and shall furnish Landlord with concurrent copies of any and all notices, reports and other written materials filed by any Tenant Party with any governmental authority in connection with such Release. Tenant shall have no obligation to remedy any Hazardous Materials contamination which was not caused by a Tenant Party.

(6) Landlord Obligations. Landlord shall be responsible for and shall indemnify, defend and hold Tenant harmless from and against all Environmental Damages which arise during the Term, as a result of the presence of, any Release of or the Handling of any Hazardous Material in, on, about or under the Building or Property whether occurring before or after the date of this Lease, except to the extent provided for in this Section 7.1(f), and shall abate any Hazardous Materials if and to the extent required by an governmental agency exercising jurisdiction over the Property; provided that Tenant shall have the burden of reasonably demonstrating that such Hazardous Materials were not of the type used by Tenant in the Building or at the Project. Tenant shall be conclusively presumed to have met its burden to the extent that any Hazardous Materials are identified as being present in any environmental report or other data existing as of the Commencement Date and are not used by Tenant.

(7) Governmental Notices. Tenant shall promptly provide Landlord with copies of all written notices received by Tenant during the Term relating to any actual or alleged presence or Handling by any Tenant Party of Hazardous Materials in, on or about the Premises or any other portion of the Project, including, without limitation, any notice of violation, notice of responsibility or demand for action from any federal, state or local governmental authority or official in connection with any actual or alleged presence or Handling by any Tenant Party of Hazardous Materials in or about the Premises or any other portion of the Project.

(8) Inspection by Landlord. In addition to, and not in limitation of, Landlord's rights under this Lease, upon reasonable prior request by Landlord, Tenant shall grant Landlord and its consultants, as well as any governmental authorities having jurisdiction over the Premises or over any aspect of Tenant's use thereof, reasonable access to the Premises at reasonable times to inspect Tenant's Handling of Hazardous Materials in, on and about the Premises, and Landlord shall not thereby incur any liability to Tenant or be deemed guilty of any disturbance of Tenant's use or possession of the Premises by reason of such entry; provided, however, that Landlord shall use reasonable efforts to minimize interference with Tenant's use of the Premises caused by such entry. Landlord shall comply with any security precaution reasonably imposed by Tenant during any entry onto the Premises and shall minimize to the extent reasonably possible any interference with Tenant's use of the Premises caused by such entry. Notwithstanding Landlord's rights of inspection and review of documents, materials and physical conditions under this Section with respect to Tenant's Handling of Hazardous Materials, Landlord shall have no duty or obligation to perform any such inspection or review or to monitor in any way any documents, materials, physical conditions or compliance with Laws in connection with Tenant's Handling of Hazardous Materials, and no third Party shall be entitled to rely on Landlord to conduct any such inspection, review or monitoring by reason of the provisions of this Section.

(9) Monitoring by Landlord. Landlord reserves the right to monitor, in Landlord's reasonable discretion and at Landlord's cost, the reasonable cost of which shall be recoverable as an Operating Expense (except in the case of a breach of any of Tenant's obligations under this Section, in which event such monitoring costs may be charged back entirely to Tenant and shall be reimbursed by Tenant to Landlord within ten (I 0) days after written demand by Landlord from time to time, accompanied by supporting documentation reasonably evidencing the costs for which such reimbursement is claimed), at such times and from time to time as Landlord in its reasonable discretion may determine, through consultants engaged by Landlord or otherwise as Landlord in its reasonable discretion may determine: (x) all aqueous and atmospheric discharges and emissions from the Premises during the Term by a Tenant Party, (y) Tenant's compliance and the collective compliance of all tenants in the Building with requirements and restrictions relating to the occupancy classification of the Building (including, but not limited to, Hazardous Materials inventory levels of Tenant and all other tenants in the Building), and (z) Tenant's compliance with all other requirements of this Section.

(10) Discovery of Discharge. If Landlord, Tenant or any governmental or quasi- governmental authority discovers any Release from the Premises during the Term by a Tenant Party in violation of this Section that, in Landlord's reasonable determination, jeopardizes the ability of the Building or the Project to meet applicable Laws or otherwise adversely affects the Building's or the Project's compliance with applicable discharge or emission standards, or if Landlord discovers any other breach of Tenant's obligations under this Section, then upon receipt of written notice from Landlord or at such earlier time as Tenant obtains actual knowledge of the applicable discharge, emission or breach, Tenant at its sole expense shall within a reasonable time (x) in the case of a Release in violation of this Lease, cease the applicable discharge or emission and remediate any continuing effects of the discharge or emission until such time, if any, as Tenant demonstrates to Landlord's reasonable satisfaction that the applicable discharge or emission is in compliance with all applicable Laws and any other applicable regulatory commitments and obligations to the satisfaction of the appropriate governmental agency with jurisdiction over the Release, and (y) in the case of any other breach of Tenant's obligations under this Section, take such corrective measures as Landlord may reasonably request in writing in order to cure or eliminate the breach as promptly as practicable and to remediate any continuing effects of the breach.

(11) Post-Occupancy Study. If Tenant or any Tenant Party Handles any Hazardous Materials in, on or about the Premises or the Project during the Term, then no later than fifteen (15) days following the Termination Date, Tenant at its sole cost and expense, shall obtain and deliver to Landlord an environmental study, performed by an expert reasonably satisfactory to Landlord, evaluating, the presence or absence of any Tenant's Contamination in, on and about the Premises and the Project. Such study shall be based on a reasonable and prudent level of tests and investigations of the Premises and surrounding portions of the Project (if appropriate) which tests shall be conducted no earlier than fifteen (15) days prior to the Termination Date. Liability for any remedial actions required or recommended on the basis of such study shall be allocated in accordance with the applicable provisions of this Lease. To the extent any such remedial actions are the responsibility of Tenant, Tenant at its sole expense shall promptly commence and diligently pursue to completion the required remedial actions.

(12) Emergency Response Plans. If Landlord in its reasonable discretion adopts any emergency response plan and/or any Contingency Plan and Emergency Procedures for the Building (and/or for multiple buildings within the Campus if and to the extent applicable) as contemplated above, Landlord shall provide copies of any such plans and procedures to Tenant and, so long as such plans and procedures are reasonable and do not materially interfere with Tenant's use or occupancy of or access to the Premises or any parking areas or materially increase the cost of Tenant's use or occupancy of the Premises, Tenant shall comply with all of the requirements of such plans and procedures to the extent applicable to Tenant and/or the Premises during the Term. If Landlord elects to adopt or materially modify any such plans or procedures that apply to the Building during the Term, Landlord shall consult with Tenant and Tenant shall reasonably cooperate in the preparation of such plans, procedures or modifications in efforts to accurately reflect and maintain consistency with Tenant's operations in the Premises, but Landlord alone shall determine, in its good faith reasonable discretion, the appropriate scope of such consultation and nothing in this Subsection (11) shall be construed to give Tenant any right of approval or disapproval over Landlord's adoption or modification of any such plans or procedures nor shall any consultation or other input provided by Tenant be relied on by Landlord or result in any liability to Tenant arising out of or in connection with such plans, procedures or modifications.

(13) Radioactive Materials. Without limiting any other applicable provisions of this Section 7.1(f), if Tenant Handles or proposes to Handle any Radioactive Materials in or about the Premises, Tenant shall provide Landlord with copies of Tenant's licenses or permits for such Radioactive Materials and with copies of all radiation protection programs and procedures required under applicable Laws or otherwise adopted by Tenant from time to time in connection with Tenant's Handling of such Radioactive Materials. In addition, Tenant shall comply with any and all rules and procedures issued by Landlord in its good faith discretion from time to time with respect to the Handling of Radioactive Materials on the Project (such as, by way of example but not limitation, rules implementing a label defacement program for decayed waste destined for common trash and/or rules relating to transportation and storage of Radioactive Materials on the Project), provided that such rules and procedures shall be reasonable and not in conflict with any applicable Laws.

(14) Deemed Holdover Occupancy. Notwithstanding any other provisions of this Lease, Tenant expressly agrees as follows:

(i) If Tenant Handles any Radioactive Materials in or about the Premises or the Project during the Tern, then for so long as any license or permit relating to such Radioactive Materials remains open or valid following the Termination Date, and another entity handling Radioactive Materials which is a prospective tenant of Landlord is legally prohibited from occupying a portion of the Premises for a use similar to the Permitted Use, then Tenant shall be deemed to be occupying that portion of the Premises on a holdover basis without Landlord's consent (notwithstanding such otherwise applicable termination or expiration of the Term) and shall be required to continue to pay Rent and other charges in accordance with Article 13 solely for that portion of the Premises effected by the radioactive materials license, until such time as all such Radioactive Materials licenses and permits have been fully closed out in accordance with the requirements of this Lease and with all applicable Hazardous Materials Laws and other Laws.

(ii) If Tenant Handles any Hazardous Materials in or about the Premises or the Project during the Term and, on or before the Termination Date, has failed to remove from the Premises or the Project all known Hazardous Materials Handled by a Tenant Party or has failed to complete any remediation or removal of Tenant's Contamination and/or to have fully remediated in compliance with the requirements of this Lease and with all applicable Hazardous Materials Laws and any other applicable Laws, the Tenant's Handling and/or Release (if applicable) of any such Hazardous Materials during the Term, then for so long as such circumstances continue to

exist, Tenant shall be deemed to be occupying the Premises on a holdover basis without Landlord's consent (notwithstanding such otherwise applicable termination or expiration of the Term) and shall be required to continue to pay Rent and other charges in accordance with Article 13 until such time as all such circumstances have been fully resolved in accordance with the requirements of this Lease and with all applicable Hazardous Materials Laws and other Laws.

(15) Survival of Obligations. Each party's obligations under this Section 7.1(f) shall survive the Termination Date and shall survive any conveyance by Landlord of its interest in the Premises. The provisions of this Section 7.1(f) and any exercise by either party of any of the rights and remedies contained herein shall be without prejudice to any other rights and remedies that such party may have under this Lease or under applicable Law with respect to any Environmental Conditions and/or any Hazardous Materials. Either party's exercise or failure to exercise, at any time or from time to time, any or all of the rights granted in this Section 7.1(f) shall not in any way impose any liability on such party or shift from the other party to such party any responsibility or obligation imposed upon the other party under this Lease, Hazardous Materials Laws or other Laws.

(16) Laboratory Rules and Regulations. Tenant agrees for itself and for its subtenants, employees, agents, and invitees to comply with the laboratory rules and regulations ("Laboratory Rules and Regulations") attached to this Lease as Exhibit C-1 and with all reasonable modifications and additions thereto which Landlord may make from time to time.

(17) Suite 120. Landlord hereby represents that, to Landlord's actual knowledge, as of the Commencement Date, Suite 120 will have been decontaminated and decommissioned per industry standards by a 3rd party vendor. Should Tenant determine that there is any noncompliance with the foregoing representation and provide Landlord with a written notice thereof, Landlord shall promptly after receipt of written notice from Tenant setting forth with specificity the nature and extent of such noncompliance, rectify the same at Landlord's expense; such noncompliance shall not, however, entitle Tenant to an abatement of rent or to terminate this Lease, or otherwise release Tenant from any of Tenant's obligations under this Lease.

7.2 LANDLORD ACCESS TO PREMISES; APPROVALS

(a) Tenant shall permit Landlord to erect, use and maintain pipes, ducts, wiring and conduits in and through the utility raceways in the Premises, so long as Tenant's use, layout or design of the Premises is not materially affected or altered. Landlord or Landlord's agents shall have the right to enter upon the Premises in the event of an emergency, or to inspect the Premises, to perform any services required hereunder, to conduct safety and other testing in the Premises and to make such repairs, alterations, improvements or additions to the Premises or the Building or other parts of the Property as Landlord may deem necessary or desirable (including all alterations, improvements and additions in connection with a change in service provider or providers). Any entry or work by Landlord may be during Standard Operating Hours and Landlord shall use reasonable efforts to ensure that any entry or work shall not materially interfere with Tenant's occupancy of the Premises.

(b) Advance notice shall not be required for entry in the event of an emergency, as reasonably determined by Landlord, but any other entry or work by Landlord shall be upon at least one (I) Business Day's prior written notice to Tenant. Any entry by Landlord or its agents shall not impair Tenant's operations more than reasonably necessary, and shall comply with Tenant's reasonable security measures, including, but not limited to, Tenant's right to escort Landlord through the Premises. If Tenant shall not be personally present to permit an entry into the Premises when for any reason an entry therein shall be necessary or permissible, Landlord (or Landlord's agents), after attempting to notify Tenant (unless Landlord believes an emergency situation exists), may enter the Premises without rendering Landlord or its agents liable therefor, and without relieving Tenant of any obligations under this Lease.

(c) Landlord may enter the Premises for the purpose of conducting such inspections, tests and studies as Landlord may deem desirable or necessary to confirm Tenant's compliance with all Laws and Hazardous Materials Laws or for other purposes necessary in Landlord's reasonable judgment to ensure the sound condition of the Property and the systems serving the Property. Landlord's rights under this Section 7.2(c) are for Landlord's own protection only, and Landlord has not, and shall not be deemed to have assumed, any responsibility to Tenant or any other party as a result of the exercise or non-exercise of such rights, for compliance with Laws or Hazardous Materials Laws or for the accuracy or sufficiency of any item or the quality or suitability of any item for its intended use.

(d) Landlord may do any of the foregoing, or undertake any of the inspection or work described in the preceding paragraphs without such action constituting an actual or constructive eviction of Tenant, in whole or in part, or giving rise to an abatement of Rent by reason of loss or interruption of business of Tenant, or otherwise.

(e) The review, approval or consent of Landlord with respect to any item required or permitted under this Lease is for Landlord's own protection only, and Landlord has not, and shall not be deemed to have assumed, any responsibility to Tenant or any other patty, as a result of the exercise or non-exercise of such rights, for compliance with Laws or Hazardous Materials Laws or for the accuracy or sufficiency of any item or the quality or suitability of any item for its intended use.

7.3 QUIET ENJOYMENT

Landlord covenants, in lieu of any implied covenant of quiet enjoyment, that so long as Tenant is Tenant is not in default under this Lease beyond the expiration of any notice, grace or cure period, Tenant shall have the right to quiet enjoyment of the Premises without hindrance or interference from Landlord or those claiming through Landlord, and subject to the covenants and conditions set forth in this Lease and to the rights of any Mortgagee.

7.4 TRANSPORTATION DEMAND MANAGEMENT PROGRAM

(a) Landlord may elect or may be required to develop and implement a Transportation Demand Management ("TDM") program for the Building in order to reduce the traffic-related impacts resulting from development of the Property. One element of any such TDM program may require tenants of the Building to adopt programs and offer incentives to their employees to reduce auto use and support the increase of alternative modes of transit. The following arc examples of such programs and incentives:

(1) Alternative commute subsidies and/or parking cash-out, where employees are provided with a subsidy if they use transit or commute by alternative modes;

(2) Opportunities to purchase commuter checks which allow employees to purchase transit tickets at discounted rates from their before-tax income; and

(3) Compressed work weeks and flex time where employees adjust their work schedules to reduce peak hour trips to/from the Building.

(b) In order to support any such TDM program for the Building, Tenant agrees that it shall, to the extent required by Law, adopt programs and offer incentives to its employees in order to reduce auto use and support the increase of alternative modes of transit. The specifics of Tenant's programs and incentives shall be tailored to the needs of Tenant's workforce and shall be determined by Tenant in its sole discretion. Upon request by Landlord from time to time, but not more often than once per calendar year, Tenant shall provide to Landlord a written report summarizing the programs and incentives, if any, being offered by Tenant to achieve the goals of the TDM program.

ARTICLE 8
MAINTENANCE

8.1 LANDLORD'S MAINTENANCE

Subject to the provisions of Articles 4 and 14 and Section 16.4, Landlord shall, as an Operating Expense, maintain and make necessary repairs to the foundations, roofs, exterior walls, and the structural elements of the Building, the electrical, plumbing, heating, ventilating, air- conditioning, mechanical, communication, security and the fire and life safety systems of the Building and those corridors, washrooms and lobbies which are Common Areas of the Building, except that: (a) Landlord shall not be responsible for the maintenance or repair of any floor or wall coverings in the Premises or any of such systems which are located exclusively within the Premises and are supplemental or special to the Building's standard systems; and (b) the cost of performing any of said maintenance or repairs whether to the Premises or to the Building caused by the negligence of Tenant, its employees, agents, servants, licensees, subtenants, contractors or invitees, shall be paid by Tenant, subject to the waivers set forth in Section 16.4. Landlord shall not be liable to Tenant for any expense, injury, loss or damage resulting from work done in or upon, or in connection with the use of, any adjacent or nearby building, land, street or alley.

8.2 TENANT'S MAINTENANCE

Tenant shall periodically inspect the Premises to identify any conditions that are dangerous or in need of maintenance, repair or replacement. Subject to the provisions of Article 14 and Section 16.4, Tenant shall promptly provide Landlord with notice of any such conditions. Tenant shall, at its sole cost and expense, perform all maintenance, repair and replacement of the Premises that are not Landlord's express responsibility under this Lease, and keep the Premises in good condition and repair, reasonable wear and tear excepted. Tenant's maintenance, repair and replacement obligations include, without limitation, maintenance, repairs and replacements of: (a) floor covering; (b) interior partitions; (c) doors; (d) the interior side of demising walls; (e) electronic, phone and data cabling, wiring and related equipment that is installed by or for the exclusive benefit of Tenant (collectively, "Cable"); (f) supplemental air conditioning units, kitchens, including hot water heaters, plumbing, and similar facilities exclusively serving Tenant; and (g) Tenant Alterations. Landlord shall allocate one hundred percent (100%) of the cost (plus any applicable administration fees) of Landlord's maintenance, repair or replacement of any Tenant Alterations (if such maintenance, repair or replacement is requested by Tenant), or repairs or replacements required to areas outside of the Premises due to same, to Tenant as additional Rent under this Lease. All maintenance, repairs and replacements, including, but not limited to, janitorial and cleaning services, pest control and waste management and recycling performed by or on behalf of Landlord or Tenant must comply with the Project's Sustainability Practices and Tenant is strongly encouraged to comply with the applicable Green Building Standards. If Tenant fails to make any repairs or replacements of the Premises under this Section 8.2 and the same shall constitute a Default under Section 11.1(e), Landlord may make the repairs or replacements, and Tenant shall pay, as additional Rent under this Lease, the reasonable cost of the repairs or replacements, together with an administrative charge in an amount equal to 10% of the cost of the repairs or replacements. Tenant hereby waives all right to make repairs or replacements at the expense of Landlord or in lieu thereof to vacate the Premises and its other similar rights as provided in California Civil Code Sections 1932(1), 1941 and 1942 or any other Laws (whether now or hereafter in effect). In addition to the foregoing, Tenant shall be responsible for all costs in connection with maintaining, repairing and replacing all special tenant fixtures and improvements, including garbage disposals, showers, plumbing, water filtration systems and appliances. If Tenant requests that Landlord maintain, repair and/or replace any such fixtures and improvements, Tenant shall reimburse Landlord for the cost of all such maintenance, repair and replacement work, plus an administrative fee equal to 15% of such cost, as additional Rent under this Lease, and Landlord's liability for such maintenance, repair and replacement work shall be subject to and limited by the provisions of Article 17 below.

ARTICLE 9
ALTERATIONS AND IMPROVEMENTS

9.1 TENANT ALTERATIONS

(a) The following provisions shall apply to the completion of any Tenant Alterations:

(1) Tenant shall not, except as provided herein, without the prior written consent of Landlord, which consent shall not be unreasonably withheld, make or cause to be made any Tenant Alterations in or to the Premises or any Property systems serving the Premises. Prior to making any Tenant Alterations, Tenant shall give Landlord ten (I 0) days prior written notice (or such earlier notice as would be necessary pursuant to applicable Law) to permit Landlord sufficient time to post appropriate notices of non-responsibility. Subject to all other requirements of this Article 9, Tenant may undertake Decoration work without Landlord's prior written consent. Tenant shall furnish Landlord with the names and addresses of all contractors and subcontractors and copies of all contracts. All Tenant Alterations shall be completed at such reasonable times and in such manner as Landlord may from time to time designate, and only by contractors or mechanics approved by Landlord, which approval shall not be unreasonably withheld; provided, however, that Landlord may, in its sole discretion, specify the engineers and contractors to perform all work relating to the Building's systems (including the mechanical, heating, plumbing, security, ventilating, air-conditioning, electrical, communication and the fire and life safety systems in the Building). The contractors, mechanics and engineers who may be used are further limited to those whose work will not cause or threaten to cause disharmony or interference with Landlord or other tenants in the Building and their respective agents and contractors

performing work in or about the Building. Landlord may further condition its consent upon Tenant furnishing to Landlord and Landlord approving prior to the commencement of any work or delivery of materials to the Premises related to the Tenant Alterations such of the following as specified by Landlord: architectural plans and specifications, opinions from Landlord's engineers stating that the Tenant Alterations will not in any way adversely affect the Building's systems, necessary permits and licenses, certificates of insurance, and such other documents in such form reasonably requested by Landlord. Landlord may, in the exercise of reasonable judgment, request that Tenant provide Landlord with appropriate evidence of Tenant's ability to complete and pay for the completion of the Tenant Alterations such as a performance bond or letter of credit. Upon completion of the Tenant Alterations, Tenant shall deliver to Landlord an as-built digitized set of plans and specifications for the Tenant Alterations in both protected document(".pdf'') and computer-aided design ("CAD") formats.

(2) Tenant shall pay the cost of all Tenant Alterations and the cost of decorating the Premises and any work to the Property occasioned thereby. Upon completion of Tenant Alterations, Tenant shall furnish Landlord with contractors' affidavits and full and final waivers of lien and receipted bills covering all labor and materials expended and used in connection therewith and such other documentation reasonably requested by Landlord or Mortgagee.

(3) Tenant agrees to complete all Tenant Alterations (i) in accordance with all Laws, Hazardous Materials Laws, all requirements of applicable insurance companies and in accordance with Landlord's standard construction rules and regulations, (ii) in a good and workmanlike manner with the use of good grades of materials, and (iii) in accordance with the requirements of the Project's Sustainability Practices. Tenant is strongly encouraged to comply with the applicable Green Building Standards. Tenant shall notify Landlord immediately if Tenant receives any notice of violation of any Law in connection with completion of any Tenant Alterations and shall immediately take such steps as are necessary to remedy such violation. In no event shall such supervision or right to supervise by Landlord nor shall any approvals given by Landlord under this Lease constitute any warranty by Landlord to Tenant of the adequacy of the design, workmanship or quality of such work or materials for Tenant's intended use or of compliance with the requirements of Section 9.1(a)(3)(i) and (ii) above or impose any liability upon Landlord in connection with the performance of such work.

(b) For any Tenant Alterations which Tenant requests Landlord to install, the forgoing provisions of this Section 9.1 shall apply; provided, however, in addition to paying the cost of the Tenant Alterations, Tenant also shall pay an administrative fee equal to fifteen percent (15%) of such cost to Landlord, as additional Rent under this Lease, and Landlord's liability for such Tenant Alterations work shall be subject to and limited by the provisions of Article 17 below. All Tenant Additions, whether installed by Landlord or Tenant, shall without compensation or credit to Tenant, become part of the Premises and the property of Landlord at the time of their installation and shall remain in the Premises, unless pursuant to Article 12, Tenant may remove them or is required to remove them at Landlord's request.

9.2 LIENS

Tenant shall not permit any lien or claim for lien of any mechanic, laborer or supplier or any other lien to be filed against the Building, the Land, the Premises, or any other part of the Property arising out of work performed, or alleged to have been performed by, or at the direction of, or on behalf of Tenant. If any such lien or claim for lien is filed, Tenant shall within ten (I 0) days after receiving notice of such lien or claim (a) have such lien or claim for lien released of record or (b) deliver to Landlord a bond in form, content, amount, and issued by surety, satisfactory to Landlord, indemnifying, protecting, defending and holding harmless the Indemnitees against all costs and liabilities resulting from such lien or claim for lien and the foreclosure or attempted foreclosure thereof. If Tenant fails to take any of the above actions, Landlord, in addition to its rights and remedies under Article 11, without investigating the validity of such lien or claim for lien, may pay or discharge the same and Tenant shall, as payment of additional Rent hereunder, reimburse Landlord upon demand for the amount so paid by Landlord, including Landlord's expenses and attorneys' fees.

ARTICLE 10
ASSIGNMENT AND SUBLETTING

10.1 ASSIGNMENT AND SUBLETTING

(a) Without the prior written consent of Landlord, which consent of Landlord shall not be unreasonably withheld, conditioned or delayed, Tenant may not sublease, assign, mortgage, pledge, hypothecate or otherwise transfer or permit the transfer of this Lease or the encumbering of Tenant's interest therein in whole or in part, by operation of Law or otherwise or permit the use or occupancy of the Premises, or any part thereof, by anyone other than Tenant. Tenant agrees that the provisions governing sublease and assignment set forth in this Article 10 shall be deemed to be reasonable. If Tenant desires to enter into any sublease of the Premises or assignment of this Lease, Tenant shall deliver written notice thereof to Landlord ("Tenant's Notice"), together with the identity of the proposed subtenant or assignee and the proposed principal terms thereof and financial and other information sufficient for Landlord to make an informed judgment with respect to such proposed subtenant or assignee at least forty-five (45) days prior to the commencement date of the term of the proposed sublease or assignment. If Tenant proposes to sublease less than all of the Rentable Area of the Premises, the space proposed to be sublet and the space retained by Tenant must each be a marketable unit as reasonably determined by Landlord and otherwise in compliance with all Laws. Landlord shall notify Tenant in writing of its approval or disapproval of the proposed sublease or assignment or its decision to exercise its rights under Section 10.2 within thirty (30) days after receipt of Tenant's Notice (and all required information). In no event may Tenant sublease any portion of the Premises or assign the Lease to any other tenant of the Project. Tenant shall submit for Landlord's approval (which approval shall not be unreasonably withheld) any advertising which Tenant or its agents intend to use with respect to the space proposed to be sublet.

(b) With respect to Landlord's consent to an assignment or sublease, Landlord may take into consideration any factors that Landlord may deem relevant, and the reasons for which Landlord's denial shall be deemed to be reasonable shall include, without limitation, the following:

(i) the creditworthiness of any proposed subtenant or assignee is not acceptable to Landlord; or

(ii) in Landlord's reasonable judgment the proposed assignee or sublessee would diminish the value or reputation of the Project, Campus or Landlord; or

(iii) any proposed assignee's or sublessee's use of the Premises would violate Section 7.1 of this Lease or would violate the provisions of any other leases of tenants in the Project; or

(iv) the proposed sublessee or assignee is a current occupant of the Project or Campus or a bona fide prospective tenant of Landlord in the Project as demonstrated by a written proposal dated within six (6) months prior to the date of Tenant's request and Landlord has vacancy in the Project of a similar size and finish as the space subject to such proposed sublease or assignment; or

(v) the proposed sublessee or assignee would materially increase the estimated pedestrian and vehicular traffic to and from the Premises and the Project above that reasonably deemed typical by Landlord for office/lab use in the Project; or

(vi) Tenant is in Default under this Lease.

(c) Any sublease or assignment shall be expressly subject to the terms and conditions of this Lease. Any subtenant or assignee shall execute such documents as Landlord may reasonably require to evidence such subtenant or assignee's assumption of the obligations and liabilities of Tenant under this Lease. Tenant shall deliver to Landlord a copy of all agreements executed by Tenant and the proposed subtenant and assignee with respect to the Premises. Landlord's approval of a sublease, assignment, hypothecation, transfer or third party use or occupancy shall not constitute a waiver of Tenant's obligation to obtain Landlord's consent to further assignments or subleases, hypothecations, transfers or third party use or occupancy.

(d) For purposes of this Article 10, an assignment shall be deemed to include a change in the majority control of Tenant resulting from any transfer, sale or assignment of shares of stock of Tenant occurring by operation of Law or otherwise (other than an Excluded Change In Majority Control, as defined below) if Tenant is a corporation whose shares of stock are not traded publicly. If Tenant is a general partnership, any change in the general partners of Tenant shall be deemed to be an assignment for purposes of this Lease. As used herein, an "Excluded Change in Majority Control" shall mean any change in the majority control of Tenant resulting from or associated with (i) any initial public offering of the capital stock or other equity interest of Tenant on any nationally recognized securities exchange or (ii) any bona fide capitalization, recapitalization or financing for the benefit of Tenant (a "Financing Event"); provided, however, in the case of a Financing Event, Tenant shall give Landlord written notice at least fifteen (15) days prior to the effective date of the Financing Event, together with evidence that Tenant shall continue to have a net worth equal to or greater than Tenant's net worth as of the date immediately prior to the Financing Event, or if prior notice is prohibited by a confidentiality agreement or securities regulations or related regulations, then as soon after the Financing Event as is permissible.

(e) o long as Tenant is not entering into a transaction described herein for the purpose of avoiding or otherwise circumventing the remaining terms of this Article, Tenant may, subject to Section 10.5, assign its entire interest under this Lease or sublease all or a portion of the Premises, without the consent of Landlord, to any of the following (each, a "Permitted Transferee") (i) an Affiliate, or (ii) a successor to Tenant by purchase or other acquisition of Tenant's capital stock or substantially all of Tenant's assets or by merger, consolidation or reorganization, provided that all of the following conditions are satisfied: (1) Tenant is not then in Default under this Lease; (2) Tenant shall give Landlord written notice at least fifteen (15) days prior to the effective date of the proposed transfer together with the information required hereunder and such entity shall expressly assume Tenant's obligations hereunder, or if prior notice is prohibited by a confidentiality agreement or securities regulations or related regulations, then as soon after the transfer as is permissible; (3) with respect to an assignment to an Affiliate, Tenant continues to have a net worth equal to or greater than Tenant's net worth as of the date immediately prior to such transfer; and (4) with respect to a purchase, merger, consolidation or reorganization which results in Tenant ceasing to exist as a separate legal entity, Tenant's successor shall have a net worth equal to Tenant's net worth at the date immediately prior to such transfer.

(f) Notwithstanding anything in this Section 10.1 to the contrary, Tenant shall be permitted to allow its contractors (i.e., parties with whom Tenant contracts to provide special services, such as scientists) to occupy certain portions of the Premises without Landlord's consent (for purposes of this Section 10.1(g), each such, person or company is referred to as an "Occupant"), provided the following conditions are satisfied: (i) such occupancy is not a subterfuge to avoid the provisions of this Article 10 concerning assignment and subleases; (ii) such occupancy is not separated from the remaining portions of the Premises by demising walls and does not have a separate entrance; (iii) each Occupant shall comply with the insurance requirements under Sections 16.1 and 16.2 (including naming Landlord and the Indemnitees required under Section 16.2 as additional insureds) as if such Occupant were Tenant (with Landlord having received evidence of such insurance prior to such Occupant's occupancy of the Premises) and shall be subject to the waivers under Section 16.4 as if such Occupant were Tenant; (iv) prior to such Occupant's occupancy of the Premises, Tenant shall have provided Landlord with the name and address of the Occupant and length of occupancy term for such Occupant; and (v) the aggregate space occupied by Occupants at any time does not exceed 1,000 rentable square feet. If an occupancy described above does not satisfy all of the foregoing conditions, then such occupancy shall constitute a sublease and shall be subject to the other provisions of this Section 10.1.

10.2 RECAPTURE

Excluding any assignment or sublease contemplated in Section 10.1(e), Landlord shall have the option to exclude from the Premises covered by this Lease ("recapture") the space proposed to be sublet for substantially the remainder of the Term or subject to the assignment, effective as of the proposed commencement date of such sublease or assignment. If Landlord elects to recapture, Tenant shall surrender possession of the space proposed to be subleased or subject to the assignment to Landlord on the effective date of recapture of such space from the Premises, such date being the Termination Date for such space. Effective as of the date of recapture of any portion of the Premises pursuant to this section, the Monthly Base Rent, Rentable Area of the Premises and Tenant's Share shall be adjusted accordingly.

10.3 EXCESS RENT

Tenant shall pay Landlord on the first day of each month during the term of the sublease or assignment, as additional Rent under this Lease, fifty percent (50%) of the amount by which the sum of all rent and other consideration (direct or indirect) due from the subtenant or assignee for such month exceeds: (i) that portion of the Monthly Base Rent and Rent Adjustments due under this Lease for said month which is allocable to the space sublet or assigned; and (ii) the following costs and expenses for the subletting or assignment of such space: (I) brokerage commissions and attorneys' fees and expenses, (2) the actual costs paid in making any improvements or substitutions in the Premises required by any sublease or assignment; (3) "free rent" periods, costs of any inducements or concessions given to subtenant or assignee; and (4) reasonable moving costs and other amounts actually paid with respect to such subtenant's or assignee's other leases or occupancy arrangements. All such costs and expenses shall be amortized over the term of the sublease or assignment pursuant to sound accounting principles.

10.4 TENANT LIABILITY

In the event of any sublease or assignment, whether or not with Landlord's consent, Tenant shall not be released or discharged from any liability, whether past, present or future, under this Lease, including any liability arising from the exercise of any renewal or expansion option, to the extent such exercise is expressly permitted by Landlord. Tenant's liability shall remain primary, and in the event of default by any subtenant, assignee or successor of Tenant in performance or observance of any of the covenants or conditions of this Lease, Landlord may proceed directly against Tenant without the necessity of exhausting remedies against said subtenant, assignee or successor. After any assignment, Landlord may consent to subsequent assignments or subletting of this Lease, or amendments or modifications of this Lease with assignees of Tenant, without notifying Tenant, or any successor of Tenant, and without obtaining its or their consent thereto, and such action shall not relieve Tenant or any successor of Tenant of liability under this Lease. If Tenant has any options to extend the Term or to add other space to the Premises, except with respect to a Permitted Transferee, such options shall not be available to any subtenant or assignee, directly or indirectly without Landlord's express written consent, which may be withheld in Landlord's sole discretion.

10.5 ASSUMPTION AND ATTORNMENT

If Tenant shall assign this Lease as permitted herein, the assignee shall expressly assume all of the obligations of Tenant hereunder accruing after the effective date of the assignment in a written instrument satisfactory to Landlord and furnished to Landlord not later than thirty (30) days prior to the effective date of the assignment. Each sublease by Tenant hereunder shall be subject and subordinate to this Lease and to the matters to which this Lease is or shall be subordinate, and each subtenant by entering into a sublease is deemed to have agreed that in the event of termination, re-entry or dispossession by Landlord under this Lease, Landlord may, at its option, either terminate the sublease or take over all of the right, title and interest of Tenant, as sublandlord, under such sublease, and such subtenant shall, at Landlord's option, attorn to Landlord pursuant to the then executory provisions of such sublease, except that Landlord shall not be: (I) liable for any previous act or omission of Tenant under such sublease; (2) subject to any counterclaim, offset or defense that such subtenant might have against Tenant; (3) bound by any previous modification of such sublease or by any rent or additional rent or advance rent which such subtenant might have paid for more than the current month to Tenant, and all such rent shall remain due and owing, notwithstanding such advance payment; (4) bound by any security or advance rental deposit made by such subtenant which is not delivered or paid over to Landlord and with respect to which such subtenant shall look solely to Tenant for refund or reimbursement; or (5) obligated to perform any work in the subleased space or to prepare it for occupancy, and in connection with such attornment, the subtenant shall execute and deliver to Landlord any instruments Landlord may reasonably request to evidence and confirm such attornment. Each subtenant or licensee of Tenant shall be deemed, automatically upon and as a condition of its occupying or using the Premises or any part thereof, to have agreed to be bound by the terms and conditions set forth in this Section 10.5. The provisions of this Section 10.5 shall be self-operative, and no further instrument shall be required to give effect to this provision.

10.6 PROCESSING EXPENSES

Tenant shall pay to Landlord, as Landlord's cost of processing each proposed assignment or subletting (whether or not the same is ultimately approved by Landlord or consummated by Tenant), the sum of One Thousand Five Hundred Dollars ($1,500.00), plus all reasonable attorneys' fees and expenses incurred by Landlord with respect to such proposed assignment or sublease, which attorneys' fees and expenses shall not exceed $3,000.00

(collectively, “Processing Costs”); provided, however, that Tenant shall pay to Landlord any additional reasonable attorneys’ fees and expenses incurred by Landlord to the extent Tenant or its proposed assignee or subtenant does not execute Landlord’s standard form of consent. Notwithstanding anything to the contrary herein, Landlord shall not be required to process any request for Landlord’s consent to an assignment or subletting until Tenant has paid to Landlord the amount of Landlord’s estimate of the Processing Costs. When the actual amount of the Processing Costs is determined, it shall be reconciled with Landlord’s estimate, and any payments or refunds required as a result thereof shall promptly thereafter be made by the parties.

ARTICLE 11
DEFAULT AND REMEDIES

11.1 DEFAULT

The occurrence or existence of any one or more of the following shall constitute a “Default” by Tenant under this Lease:

(a) Tenant fails to pay any installment or other payment of Rent including Rent Adjustment Deposits or Rent Adjustments within five (5) days after the date when due;

(b) Tenant abandons the Premises;

(c) Tenant violates the restrictions on assignments and subleases set forth in Article 10 Assignment and Subletting and fails to cure such default within five (5) Business Days after receipt of written notice thereof from Landlord;

(d) Tenant fails to maintain any insurance policy required of it hereunder, and fails to cure such default within five (5) Business Days after receipt of written notice thereof from Landlord;

(e) Tenant fails to observe or perform any of the other covenants, conditions or provisions of this Lease or the Workletter and fails to cure such default within thirty (30) days after written notice thereof to Tenant, or such longer time as may reasonably be required to cure the default, so long as Tenant commences such cure within thirty (30) days after written notice thereof and diligently pursues such cure to completion unless the failure to perform is a Default for which this Lease expressly specifies there is no cure or grace period;

(f) the interest of Tenant in this Lease is levied upon under execution or other legal process;

(g) a petition is filed by or against Tenant to declare Tenant bankrupt or seeking a plan of reorganization or arrangement under any Chapter of the Bankruptcy Code, or any amendment, replacement or substitution therefor, or to delay payment of, reduce or modify Tenant’s debts, which in the case of an involuntary action is not discharged within thirty (30) days;

(h) Tenant is declared insolvent by Law or any assignment of Tenant’s property is made for the benefit of creditors;

(i) a receiver is appointed for Tenant or Tenant’s property, which appointment is not discharged within thirty (30) days;

(j) any action taken by or against Tenant to reorganize or modify Tenant’s capital structure in a materially adverse way which in the case of an involuntary action is not discharged within thirty (30) days;

(k) upon the dissolution of Tenant; or

(l) upon the third occurrence during any twelve (12)-month period during the Term that Tenant fails to pay Rent when due or has breached a particular covenant of this Lease (whether or not such failure or breach is thereafter cured within any stated cure or grace period or statutory period).

11.2 LANDLORD'S REMEDIES

(a) A Default shall constitute a breach of this Lease for which Landlord shall have the rights and remedies set forth in this Section 11.2 and all other rights and remedies set forth in this Lease or now or hereafter allowed by Law, whether legal or equitable, and all rights and remedies of Landlord shall be cumulative and none shall exclude any other right or remedy now or hereafter allowed by applicable Law.

(b) With respect to a Default, at any time Landlord may terminate Tenant's right to possession by written notice to Tenant stating such election. Any written notice required pursuant to Section 11.1 shall constitute notice of unlawful detainer pursuant to California Code of Civil Procedure Section 1161 if, at Landlord's sole discretion, it states Landlord's election that Tenant's right to possession is terminated after expiration of any period required by Law or any longer period required by Section 11.1. Upon the expiration of the period stated in Landlord's written notice of termination (and unless such notice provides an option to cure within such period and Tenant cures the Default within such period), Tenant's right to possession shall terminate and this Lease shall terminate, and Tenant shall remain liable as hereinafter provided. Upon such termination in writing of Tenant's right to possession, Landlord shall have the right, subject to applicable Law, to re-enter the Premises and dispossess Tenant and the legal representatives of Tenant and all other occupants of the Premises by unlawful detainer or other summary proceedings, or as otherwise permitted by Law, regain possession of the Premises and remove their property (including their trade fixtures, personal property and Required Removables pursuant to Article 12), but Landlord shall not be obligated to effect such removal, and such property may, at Landlord's option, be stored elsewhere, sold or otherwise dealt with as permitted by Law, at the risk of, expense of and for the account of Tenant, and the proceeds of any sale shall be applied pursuant to Law. Landlord shall in no event be responsible for the value, preservation or safekeeping of any such property. Tenant hereby waives all claims for damages that may be caused by Landlord's removing or storing Tenant's personal property pursuant to this Section or Section 12.1, and Tenant hereby indemnifies, and agrees to defend, protect and hold harmless, the Indemnitees from any and all loss, claims, demands, actions, expenses, liability and cost (including attorneys' fees and expenses) arising out of or in any way related to such removal or storage. Upon such written termination of Tenant's right to possession and this Lease, Landlord shall have the right to recover damages for Tenant's Default as provided herein or by Law, including the following damages provided by California Civil Code Section 1951.2:

(1) the worth at the time of award of the unpaid Rent which had been earned at the time of termination;

(2) the worth at the time of award of the amount by which the unpaid Rent which would have been earned after termination until the time of award exceeds the amount of such Rent loss that Tenant proves could reasonably have been avoided;

(3) the worth at the time of award of the amount by which the unpaid Rent for the balance of the term of this Lease after the time of award exceeds the amount of such Rent loss that Tenant proves could be reasonably avoided; and

(4) any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including, without limitation, Landlord's unamortized costs of tenant improvements, leasing commissions and legal fees incurred in connection with entering into this Lease; and

The word "rent" as used in this Section 11.2 shall have the same meaning as the defined term Rent in this Lease. The "worth at the time of award" of the amount referred to in clauses (I) and (2) above is computed by allowing interest at the Default Rate. The worth at the time of award of the amount referred to in clause (3) above is computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (I%). For the purpose of determining unpaid Rent under clause (3) above, the monthly Rent reserved in this Lease shall be deemed to be the sum of the Monthly Base Rent, monthly storage space rent, if any, the amounts last payable by Tenant as Rent Adjustments for the calendar year in which Landlord terminated this Lease as provided hereinabove.

(c) Even if Tenant is in Default and/or has abandoned the Premises, this Lease shall continue in effect for so long as Landlord does not terminate Tenant's right to possession by written notice as provided in Section 11.2(b) above, and Landlord may enforce all its rights and remedies under this Lease, including the right to recover Rent as it becomes due under this Lease. In such event, Landlord shall have all of the rights and remedies of a landlord under California Civil Code Section 1951.4 (lessor may continue Lease in effect after lessee's breach and abandonment and recover Rent as it becomes due, if lessee has the right to sublet or assign, subject only to reasonable limitations), or any successor statute. During such time as Tenant is in Default, if Landlord has not terminated this Lease by written notice and if Tenant requests Landlord's consent to an assignment of this Lease or a sublease of the Premises, such consent shall be governed by the terms and conditions of Article 10 above. Tenant acknowledges and agrees that the provisions of Article 10 shall be deemed to constitute reasonable limitations of Tenant's right to assign or sublet. Tenant acknowledges and agrees that in the absence of written notice pursuant to Section 11.2(b) above terminating Tenant's right to possession, no other act of Landlord shall constitute a termination of Tenant's right to possession or an acceptance of Tenant's surrender of the Premises, including acts of maintenance or preservation or efforts to relet the Premises or the appointment of a receiver upon initiative of Landlord to protect Landlord's interest under this Lease or the withholding of consent to a subletting or assignment, or terminating a subletting or assignment, if in accordance with other provisions of this Lease.

(d) In the event that Landlord seeks an injunction with respect to a breach or threatened breach by Tenant of any of the covenants, conditions or provisions of this Lease, Tenant agrees to pay the premium for any bond required in connection with such injunction.

(e) Tenant hereby waives any and all rights to relief from forfeiture, redemption or reinstatement granted by Law (including California Civil Code of Procedure Sections 1174 and 1179) in the event of Tenant being evicted or dispossessed for any cause or in the event of Landlord obtaining possession of the Premises by reason of Tenant's Default or otherwise.

(f) Notwithstanding any other provision of this Lease, a notice to Tenant given under this Article and Article 24 of this Lease or given pursuant to California Code of Civil Procedure Section 1161, and any notice served by mail, shall be deemed served, and the requisite waiting period deemed to begin under said Code of Civil Procedure Section upon mailing (except as may be required under Code of Civil Procedure Section 1161 et seq.), without any additional waiting requirement under Code of Civil Procedure Section 1011 et seq. or by other Law. For purposes of Code of Civil Procedure Section 1162, Tenant's "place of residence", "usual place of business", "the property" and "the place where the property is situated" shall mean and be the Premises, whether or not Tenant has vacated same at the time of service.

(g) The voluntary or other surrender or termination of this Lease, or a mutual termination or cancellation thereof, shall not work a merger and shall terminate all or any existing assignments, subleases, subtenancies or occupancies permitted by Tenant, except if and as otherwise specified in writing by Landlord.

(h) No delay or omission in the exercise of any right or remedy of Landlord upon any default by Tenant, and no exercise by Landlord of its rights pursuant to Section 25.16 to perform any duty which Tenant fails timely to perform, shall impair any right or remedy or be construed as a waiver. No provision of this Lease shall be deemed waived by Landlord unless such waiver is in writing signed by Landlord. The waiver by Landlord of any breach of any provision of this Lease shall not be deemed a waiver of any subsequent breach of the same or any other provision of this Lease.

11.3 ATTORNEY'S FEES

In the event any party brings any suit or other proceeding with respect to the subject matter or enforcement of this Lease, the prevailing party (as determined by the court, agency or other authority before which such suit or proceeding is commenced) shall, in addition to such other relief as may be awarded, be entitled to recover attorneys' fees, expenses and costs of investigation as actually incurred, including court costs, expert witness fees, costs and expenses of investigation, and all attorneys' fees, costs and expenses in any such suit or proceeding (including in any action or participation in or in connection with any case or proceeding under the Bankruptcy Code, 11 United States Code Sections IOI et seq. (the "Bankruptcy Code"), or any successor statutes, in establishing or enforcing the right to indemnification, in appellate proceedings, or in connection with the enforcement or collection of any judgment obtained in any such suit or proceeding).

11.4 BANKRUPTCY

The following provisions shall apply in the event of the bankruptcy or insolvency of Tenant:

(a) In connection with any proceeding under Chapter 7 of the Bankruptcy Code where the trustee of Tenant elects to assume this Lease for the purposes of assigning it, such election or assignment, may only be made upon compliance with the provisions of (b) and (c) below, which conditions Landlord and Tenant acknowledge to be commercially reasonable. In the event the trustee elects to reject this Lease, then Landlord shall immediately be entitled to possession of the Premises without further obligation to Tenant or the trustee.

(b) Any election to assume this Lease under Chapter 11 or 13 of the Bankruptcy Code by Tenant as debtor-in-possession or by Tenant's trustee (the "Electing Party") must provide for:

The Electing Party to cure or provide to Landlord adequate assurance that it will cure all monetary defaults under this Lease within fifteen (15) days from the date of assumption, and that it will cure all nonmonetary defaults under this Lease within thirty (30) days from the date of assumption. Landlord and Tenant acknowledge such condition to be commercially reasonable.

(c) If the Electing Party has assumed this Lease or elects to assign Tenant's interest under this Lease to any other person, such interest may be assigned only if the intended assignee has provided adequate assurance of future performance (as herein defined), of all of the obligations imposed on Tenant under this Lease.

For the purposes hereof, "adequate assurance of future performance" means that Landlord has ascertained that each of the following conditions has been satisfied:

(i) The assignee has submitted a current financial statement, certified by its chief financial officer, which shows a net worth and working capital in amounts sufficient to assure the future performance by the assignee of Tenant's obligations under this Lease; and

(ii) Landlord has obtained consents or waivers from any third parties that may be required under a lease, mortgage, financing arrangement, or other agreement by which Landlord is bound, to enable Landlord to permit such assignment.

(d) Landlord's acceptance of rent or any other payment from any trustee, receiver, assignee, person, or other entity will not be deemed to have waived, or waive, the requirement of Landlord's consent, Landlord's right to terminate this Lease for any transfer of Tenant's interest under this Lease without such consent, or Landlord's claim for any amount of Rent due from Tenant.

11.5 LANDLORD'S DEFAULT

Landlord shall be in default hereunder in the event Landlord has not commenced and pursued with reasonable diligence the cure of any failure of Landlord to meet its obligations hereunder within thirty (30) days after the receipt by Landlord of written notice from Tenant of the alleged failure to perform. Failure to provide the requisite notice and cure period by Tenant under this paragraph shall be an absolute defense by Landlord against any claims for failure to perform any of its obligations. In no event shall Tenant have the right to terminate or rescind this Lease as a result of Landlord's default as to any covenant or agreement contained in this Lease. Tenant hereby waives such remedies of termination and rescission and hereby agrees that Tenant's remedies for default hereunder and for breach of any promise or inducement shall be limited to a suit for damages and/or injunction. In addition, Tenant hereby covenants that, prior to the exercise of any such remedies, it will give any Mortgagee notice and a reasonable time to cure any default by Landlord (as specified in Section 23.2 below).

ARTICLE 12
SURRENDER OF PREMISES

12.1 IN GENERAL

Upon the Termination Date, Tenant shall surrender and vacate the Premises immediately and deliver possession thereof to Landlord in a clean, good and tenantable condition, ordinary wear and tear, Hazardous Materials (other than those which are Tenant's responsibility hereunder), casualty and condemnation, and damage caused by Landlord excepted. Tenant shall deliver to Landlord all keys to the Premises. All improvements in and to the Premises, including any Tenant Alterations (collectively, "Leasehold Improvements") shall remain upon the Premises at the end of the Term without compensation to Tenant. Tenant's trade fixtures, furniture, equipment and other personal property installed in the Premises ("Tenant's Property") shall at all times be and remain Tenant's property. Except for Alterations which cannot be removed without structural injury to the Premises, at any time Tenant may remove Tenant's Property from the Premises, provided that Tenant repairs all damage caused by such removal. Landlord shall have no lien or other interest in any item of Tenant's Property. Landlord, however, by written notice to Tenant at least thirty (30) days prior to the Termination Date, may require Tenant, at its expense, to remove (a) any Cable installed by or for the benefit of Tenant, and (b) any Tenant Additions that Landlord designated for removal at the time of consent and that, in Landlord's reasonable judgment, are of a nature that would require removal and repair costs that are materially in excess of the removal and repair costs associated with standard laboratory and office improvements (collectively referred to as "Required Removables"). Required Removables may include, without limitation, internal stairways, raised floors, personal baths and showers, vaults, rolling file systems and structural alterations and modifications. The designated Required Removables shall be removed by Tenant before the Termination Date. Tenant's removal and disposal of items pursuant to this Section 12.1 must comply with the Project's Sustainability Practices and Tenant is strongly encouraged to comply with the applicable Green Building Standards. Tenant shall repair damage caused by the installation or removal of Required Removables. If Tenant fails to perform its obligations in a timely manner, Landlord may perform such work at Tenant's expense. In the event possession of the Premises is not delivered to Landlord when required hereunder, or if Tenant shall fail to remove those items described above, Landlord may (but shall not be obligated to), at Tenant's expense, remove any of such property and store, sell or otherwise deal with such property, and undertake, at Tenant's expense, such restoration work as Landlord deems necessary or advisable. Notwithstanding anything in this Section 12.1 to the contrary, failure by Tenant to strictly comply with the provisions of this Section 12.1 with respect to any Required Removables that are required to be removed from the Premises by Tenant hereunder shall constitute a failure of Tenant to validly surrender the Premises.

12.2 LANDLORD'S RIGHTS

All property which may be removed from the Premises by Landlord shall be conclusively presumed to have been abandoned by Tenant and Landlord may deal with such property as provided in Section 11.2(b), including the waiver and indemnity obligations provided in that Section. Tenant shall also reimburse Landlord for all costs and expenses incurred by Landlord in removing any Tenant Additions and in restoring the Premises to the condition required by this Lease.

ARTICLE 13
HOLDING OVER

In the event that Tenant holds over in possession of the Premises after the Termination Date, for each month or partial month Tenant holds over possession of the Premises, Tenant shall pay Landlord (i) 150% of the monthly Rent payable for the month immediately preceding the holding over (including increases for Rent Adjustments which Landlord may reasonably estimate) for the first 90 days of such holdover and (ii) 200% of the monthly Rent payable for the month immediately preceding the holding over (including increases for Rent Adjustments which Landlord may reasonably estimate) after the first 90 days of such holdover. Tenant shall also pay all damages, excluding, however, consequential damages (i.e., loss of income from prospective tenants), sustained by Landlord by reason of such holding over. The provisions of this Article shall not constitute a waiver by Landlord of any re-entry rights of Landlord, and Tenant's continued occupancy of the Premises shall be as a tenancy in sufferance.

ARTICLE 14
DAMAGE BY FIRE OR OTHER CASUALTY

14.1 SUBSTANTIAL UNTENANTABILITY

(a) If any fire or other casualty (whether insured or uninsured) renders all or a substantial portion of the Premises or the Building untenantable, Landlord shall, with reasonable promptness after the occurrence of such damage, estimate the length of time that will be required to substantially complete the repair and restoration and shall, by notice advise Tenant of such estimate ("Landlord's Notice"). If Landlord estimates that the amount of time required to substantially complete such repair and restoration will exceed two hundred seventy (270) days from the date such damage occurred, then Landlord, or Tenant if all or a substantial portion of the Premises is rendered untenantable, shall have the right to terminate this Lease as of the date of such damage by delivering written notice to the other at any time within twenty (20) days after delivery of Landlord's Notice, provided that if Landlord so chooses, Landlord's Notice may also constitute such notice of termination.

(b) Unless this Lease is terminated as provided in the preceding subparagraph, Landlord shall proceed with reasonable promptness to repair and restore the Premises to its condition as existed prior to such casualty, subject to reasonable delays for insurance adjustments and Force Majeure delays, and also subject to zoning Laws and building codes then in effect. Landlord shall have no liability to Tenant, and Tenant shall not be entitled to terminate this Lease if such repairs and restoration are not in fact completed within the time period estimated by Landlord so long as Landlord shall proceed with reasonable diligence to complete such repairs and restoration.

(c) Tenant acknowledges that Landlord shall be entitled to the full proceeds of any insurance coverage, whether carried by Landlord or Tenant, for damages to the Premises, except for those proceeds of Tenant's insurance for its own personal property and equipment which would be removable by Tenant at the Termination Date. All such insurance proceeds shall be payable to Landlord whether or not the Premises are to be repaired and restored; provided, however, if this Lease is not terminated and the parties proceed to repair and restore Tenant Additions at Tenant's cost, to the extent Landlord received proceeds of Tenant's insurance covering Tenant Additions, such proceeds shall be applied to reimburse Tenant for its cost of repairing and restoring Tenant Additions.

(d) Notwithstanding anything to the contrary herein set forth: (i) Landlord shall have no duty pursuant to this Section to repair or restore any portion of any Tenant Additions or to expend for any repair or restoration of the Premises or Building in amounts in excess of insurance proceeds paid to Landlord and available for repair or restoration; and (ii) Tenant shall not have the right to terminate this Lease pursuant to this Section if any damage or destruction was caused by the willful misconduct or gross negligence of Tenant, its agent or employees. Whether or not this Lease is terminated pursuant to this Article 14, in no event shall Tenant be entitled to any compensation or damages for loss of the use of the whole or any part of the Premises or for any inconvenience or annoyance occasioned by any such damage, destruction, rebuilding or restoration of the Premises or the Building or access thereto.

(e) Any repair or restoration of the Premises performed by Tenant shall be in accordance with the provisions of Article 9 hereof.

14.2 INSUBSTANTIAL UNTENANTABILITY

If the Premises or the Building is damaged by a casualty but neither is rendered substantially untenantable and either (i) Landlord estimates that the time to substantially complete the repair or restoration will not exceed two hundred seventy (270) days from the date such damage occurred, or (ii) the cost to repair or restore is less than ten percent (I 0%) of the replacement cost of the Building, then Landlord shall proceed to repair and restore the Building or the Premises other than Tenant Additions, with reasonable promptness, unless such damage is to the Premises and occurs during the last six (6) months of the Term, in which event either Tenant or Landlord shall have the right to terminate this Lease as of the date of such casualty by giving written notice thereof to the other within twenty (20) days after the date of such casualty. Notwithstanding the aforesaid, Landlord's obligation to repair shall be limited in accordance with the provisions of Section 14.1 above.

14.3 RENT ABATEMENT

Except if due to the willful misconduct of Tenant or its employees, if all or any part of the Premises are rendered untenantable by fire or other casualty and this Lease is not terminated, Monthly Base Rent and Rent Adjustments shall abate for that part of the Premises which is untenantable on a per diem basis from the date of the casualty until Landlord has Substantially Completed the repair and restoration work in the Premises which it is required to perform, provided, that as a result of such casualty, Tenant does not occupy the portion of the Premises which is untenantable during such period.

14.4 WAIVER OF STATUTORY REMEDIES

The provisions of this Lease, including this Article 14, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, the Premises or the Property or any part of either, and any Law, including Sections 1932(2), 1933(4), 1941 and 1942 of the California Civil Code, with respect to any rights or obligations concerning damage or destruction shall have no application to this Lease or to any damage to or destruction of all or any part of the Premises or the Property or any part of either, and are hereby waived.

ARTICLE 15
EMINENT DOMAIN

15.1 TAKING OF WHOLE OR SUBSTANTIAL PART

In the event the whole or any substantial part of the Building or of the Premises is taken or condemned by any competent authority for any public use or purpose (including a deed given in lieu of condemnation) and is thereby rendered untenantable, this Lease shall terminate as of the date title vests in such authority, and Monthly Base Rent and Rent Adjustments shall be apportioned as of the Termination Date. Notwithstanding anything to the contrary herein set forth, in the event the taking is temporary (for less than the remaining Term of this Lease), Landlord may elect either (i) to terminate this Lease or (ii) permit Tenant to receive the entire award attributable to the Premises in which case Tenant shall continue to pay Rent and this Lease shall not terminate.

15.2 TAKING OF PART

In the event a part of the Building or the Premises is taken or condemned by any competent authority (or a deed is delivered in lieu of condemnation) and this Lease is not terminated, this Lease shall be amended to reduce or increase, as the case may be, the Monthly Base Rent and Tenant’s Share to reflect the Rentable Area of the Premises or Building, as the case may be, remaining after any such taking or condemnation. Landlord, upon receipt and to the extent of the award in condemnation (or proceeds of sale) shall make necessary repairs and restorations to the Premises (exclusive of Tenant Additions) and to the Building to the extent necessary to constitute the portion of the Building not so taken or condemned as a complete architectural and economically efficient unit. Notwithstanding the foregoing, if as a result of any taking, or a governmental order that the grade of any street or alley adjacent to the Building is to be changed and such taking or change of grade makes it necessary or desirable to substantially remodel or restore the Building or prevents the economical operation of the Building, Landlord shall have the right to terminate this Lease upon ninety (90) days prior written notice to Tenant.

15.3 COMPENSATION

Landlord shall be entitled to receive the entire award (or sale proceeds) from any such taking, condemnation or sale without any payment to Tenant, and Tenant hereby assigns to Landlord, Tenant’s interest, if any, in such award; provided, however, Tenant shall have the right separately to pursue against the condemning authority a separate award in respect of the loss, if any, to Tenant Additions paid for by Tenant without any credit or allowance from Landlord.

ARTICLE 16
INSURANCE

16.1 TENANT'S INSURANCE

Tenant, at Tenant's expense, agrees to maintain in force, with a company or companies acceptable to Landlord, during the Term: (a) Commercial General Liability Insurance on a primary basis and without any right of contribution from any insurance carried by Landlord covering the Premises on an occurrence basis against all claims for personal injury, bodily injury, death and property damage, including contractual liability covering the indemnification provisions in this Lease, and such insurance shall be for such limits that are reasonably required by Landlord from time to time but not less than a combined single limit (each occurrence and in the aggregate) of Five Million Dollars ($5,000,000.00) (which limit may be achieved through use of umbrella coverage); (b) Workers' Compensation and Employers' Liability Insurance to the extent required by and in accordance with the Laws of the State of California; (c) "All Risks" or "Special Form" property insurance in an amount adequate to cover the full replacement cost of all Tenant Additions, equipment, installations, fixtures and contents of the Premises in the event of loss from water damage and earthquake sprinkler leakage; (d) in the event a motor vehicle is to be used by Tenant in connection with its business operation from the Premises, Comprehensive Automobile Liability Insurance coverage with limits of not less than One Million Dollars ($1,000,000.00) combined single limit coverage against bodily injury liability and property damage liability arising out of the use by or on behalf of Tenant, its agents and employees in connection with this Lease, of any owned, non-owned or hired motor vehicles; and (e) such other insurance or coverages as Landlord reasonably requires.

16.2 FORM OF POLICIES

Each policy referred to in Section 16.1 shall satisfy the following requirements. Each policy shall (i) name Landlord and the Indemnitees as additional insureds (except "All Risks" or "Special Form" property insurance, on which Landlord and the Mortgagee, as their interests may appear, shall be named as "loss payees", and Workers' Compensation and Employers' Liability insurance), (ii) be issued by one or more responsible insurance companies licensed to do business in the State of California reasonably satisfactory to Landlord, (iii) where applicable, provide for deductible amounts satisfactory to Landlord and not permit co-insurance, and (iv) each policy of "All-Risks" or "Special Form" property insurance shall provide that the policy shall not be invalidated should the insured waive in writing prior to a loss, any or all rights of recovery against any other party for losses covered by such policy. Tenant shall deliver to Landlord certificate(s) of insurance prior to the Commencement Date and prior to the expiration date of each policy. Additionally, Tenant shall provide Landlord written notice of any cancellation or amendment of any such insurance within two (2) Business Days following Tenant's knowledge of the same. If Tenant fails to carry the insurance required under this Article 16 or fails to provide certificate(s) of such insurance and when required hereunder and the same constitutes a Default hereunder, Landlord may, but shall not be obligated to acquire such insurance on Tenant's behalf or Tenant's sole cost and expense.

16.3 LANDLORD'S INSURANCE

Landlord agrees to purchase and keep in full force and effect during the Term hereof, including any extensions or renewals thereof, insurance under policies issued by insurers of recognized responsibility, qualified to do business in the State of California on the Building in amounts sufficient to cover 80% of the replacement cost thereof, or an amount sufficient to prevent Landlord from becoming a co-insurer under the terms of the applicable policies, insuring against fire and such other risks as may be included in "All Risks" or "Special Form" coverage insurance reasonably available from time to time (which requirement may be achieved through use of a single insurance policy covering multiple buildings owned by Landlord and affiliates of Landlord). Landlord agrees to maintain in force during the Term, Commercial General Liability Insurance covering the Building on an occurrence basis against all claims for personal injury, bodily injury, death, and property damage. Such insurance shall be for a combined single limit (each occurrence and in the aggregate) of not less than Five Million Dollars ($5,000,000.00) (which limit may be achieved through use of umbrella coverage). Neither Landlord's obligation to carry such insurance nor the carrying of such insurance shall be deemed to be an indemnity by Landlord with respect to any claim, liability, loss, cost or expense due, in whole or in part, to Tenant's negligent acts or omissions or willful misconduct. Without obligation to do so, Landlord may, in its sole discretion from time to time, carry insurance in amounts greater and/or for coverage additional to the coverage and amounts set forth above. Each policy of "All-Risks" or "Special Form" property insurance required to be maintained by Landlord shall provide that the policy shall not be invalidated should the insured waive in writing prior to a loss, any or all rights of recovery against any other party for losses covered by such policy.

16.4 WAIVER OF SUBROGATION AND CLAIMS

(a) Landlord agrees that, if obtainable at no, or minimal, additional cost, and so long as the same is permitted under the laws of the State of California, it will include in its "All Risks" or "Special Form" insurance policy or policies appropriate clauses pursuant to which the insurance companies (i) waive all right of subrogation against Tenant with respect to losses payable under such policies and/or (ii) agree that such policies shall not be invalidated should the insured waive in writing prior to a loss any or all right of recovery against any party for losses covered by such policies.

(b) Tenant agrees to include, if obtainable at no, or minimal, additional cost, and so long as the same is permitted under the laws of the State of California, in its "All Risks" or "Special Form" insurance policy or policies on Tenant Additions, whether or not removable, and on Tenant's furniture, furnishings, fixtures and other property removable by Tenant under the provisions of this Lease, appropriate clauses pursuant to which the insurance company or companies (i) waive the right of subrogation against Landlord and/or any tenant of space in the Building with respect to losses payable under such policy or policies and/or (ii) agree that such policy or policies shall not be invalidated should the insured waive in writing prior to a loss any or all right of recovery against any party for losses covered by such policy or policies. If Tenant is unable to obtain in such policy or policies either of the clauses described in the preceding sentence, Tenant shall, if legally possible and without necessitating a change in insurance carriers, have Landlord named in such policy or policies as an additional insured. If Landlord shall be named as an additional insured in accordance with the foregoing, Landlord agrees to endorse promptly to the order of Tenant, without recourse, any check, draft, or order for the payment of money representing the proceeds of any such policy or representing any other payment growing out of or connected with said policies, and Landlord does hereby irrevocably waive any and all rights in and to such proceeds and payments.

(c) (c) Landlord hereby waives any and all right of recovery which it might otherwise have against Tenant, its servants, agents and employees, for loss or damage occurring to the Property and the fixtures, appurtenances and equipment therein, to the extent the same is coverable by Landlord's insurance, notwithstanding that such loss or damage may result from the negligence or fault of Tenant, its servants, agents or employees. Tenant hereby waives any and all right of recovery which it might otherwise have against Landlord, its servants, and employees and against every other tenant of the Real Property who shall have executed a similar waiver as set forth in this Section 16.4(c) for loss or damage to Tenant Additions, whether or not removable, and to Tenant's furniture, furnishings, fixtures and other property removable by Tenant under the provisions hereof, to the extent the same is coverable by Tenant's insurance required under this Lease, notwithstanding that such loss or damage may result from the negligence or fault of Landlord, its servants, agents or employees, or such other tenant and the servants, agents or employees thereof.

(d) Landlord and Tenant hereby agree to advise the other promptly if the clauses to be included in their respective insurance policies pursuant to subparagraphs (a) and (b) above cannot be obtained on the terms hereinbefore provided. Landlord and Tenant hereby also agree to notify the other promptly of any cancellation or change of the terms of any such policy that would affect such clauses.

16.5 NOTICE OF CASUALTY

Tenant shall give Landlord notice in case of a fire or accident in the Premises promptly after Tenant is aware of such event.

ARTICLE 17
WAIVER OF CLAIMS AND INDEMNITY

17.1 WAIVER OF CLAIMS

To the extent permitted by Law, Tenant hereby releases the Indemnitees from, and waives all claims for, damage to person or property sustained by Tenant or any occupant of the Premises or the Property resulting directly or indirectly from any existing or future condition, defect, matter or thing in and about the Premises or the Property or any part of either or any equipment or appurtenance therein, or resulting from any accident in or about the Premises or the Property, or resulting directly or indirectly from any act or neglect of any tenant or occupant of the Property or of any other person, including Landlord's agents and servants, except to the extent caused by Landlord's breach of

this Lease (except as otherwise provided in Section 11.5 above) or by the sole negligence or willful and wrongful act of the Indemnitees or any of them. To the extent permitted by Law, Tenant hereby waives any consequential damages, compensation or claims for inconvenience or loss of business, rents, or profits as a result of such injury or damage, whether or not caused by the negligence or willful and wrongful act of any of the Indemnitees. If any such damage, whether to the Premises or the Property or any part of either, or whether to Landlord or to other tenants in the Property, results from any act or neglect of Tenant, its employees, servants, agents, contractors, invitees or customers, Tenant shall be liable therefor and Landlord may, at Landlord's option, repair such damage and Tenant shall, upon demand by Landlord, as payment of additional Rent hereunder, reimburse Landlord within ten (I 0) days after demand for the total cost of such repairs, in excess of amounts, if any, paid to Landlord under insurance covering such damages and except to the extent Landlord and its insurer have waived claims therefor pursuant to Section 16.4 above. Tenant shall not be liable for any such damage caused by its acts or neglect if Landlord or a tenant has recovered the full amount of the damage from proceeds of insurance policies and the insurance company has waived its right of subrogation against Tenant.

17.2 INDEMNITY

To the extent permitted by Law, Tenant hereby indemnifies, and agrees to protect, defend and hold the Indemnitees harmless, against any and all actions, claims, demands, liability, costs and expenses, including attorneys' fees and expenses for the defense thereof, arising from Tenant's occupancy of the Premises, from the undertaking of any Tenant Additions or repairs to the Premises, from the conduct of Tenant's business on the Premises, or from any breach or default on the part of Tenant in the performance of any covenant or agreement on the part of Tenant to be performed pursuant to the terms of this Lease, or from any willful act or negligence of Tenant, its agents, contractors, servants, employees, customers or invitees, in or about the Premises or the Property or any part of either. In case of any action or proceeding brought against the Indemnitees by reason of any such claim, upon notice from Landlord, Tenant covenants to defend such action or proceeding by counsel chosen by Landlord, in Landlord's sole discretion. Landlord reserves the right to settle, compromise or dispose of any and all actions, claims and demands related to the foregoing indemnity. The foregoing indemnity shall not operate to relieve Indemnitees of liability to the extent such liability is caused by the sole negligence or willful and wrongful act of Indemnitees. Further, the foregoing indemnity is subject to and shall not diminish any waivers in effect in accordance with Section 16.4 by Landlord or its insurers to the extent of amounts, if any, paid to Landlord under its "All Risks" property insurance. This Article 17 shall survive the expiration or earlier termination of this Lease.

ARTICLE 18
RULES AND REGULATIONS

18.1 RULES

Tenant agrees for itself and for its subtenants, employees, agents, and invitees to comply with the rules and regulations listed on Exhibit C-2 attached hereto and with all reasonable modifications and additions thereto which Landlord may make from time to time.

18.2 ENFORCEMENT

Nothing in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce the rules and regulations as set forth on Exhibit C-2 or as hereafter adopted, or the terms, covenants or conditions of any other lease as against any other tenant, and Landlord shall not be liable to Tenant for violation of the same by any other tenant, its servants, employees, agents, visitors or licensees. Landlord shall use reasonable efforts to enforce the rules and regulations of the Campus in a uniform and non-discriminatory manner.

ARTICLE 19
LANDLORD'S RESERVED RIGHTS

Landlord shall have the following rights exercisable without notice to Tenant and without liability to Tenant for damage or injury to persons, property or business and without being deemed an eviction or disturbance of Tenant's use or possession of the Premises or giving rise to any claim for offset or abatement of Rent: (1) to change the Building's name or street address upon thirty (30) days' prior written notice to Tenant; (2) to install, affix and maintain all signs on the exterior and/or interior of the Building; (3) to designate and/or approve prior to installation, all types of signs, window shades, blinds, drapes, awnings or other similar items, and all internal lighting that may be visible from the exterior of the Premises; (4) upon reasonable notice to Tenant, to display the Premises to prospective purchasers and lenders at reasonable hours at any time during the Term and to prospective tenants at reasonable hours during the last twelve (12) months of the Term; (5) to grant to any party the exclusive right to conduct any business or render any service in or to the Campus, provided such exclusive right shall not operate to prohibit Tenant from using the Premises for the purpose permitted hereunder; (6) to change the arrangement and/or location of entrances or passageways, doors and doorways, corridors, elevators, stairs, washrooms or public portions of the Building, and to close entrances, doors, corridors, elevators or other facilities, provided that such action shall not materially and adversely interfere with Tenant's access to the Premises or the Building; (7) to have access for Landlord and other tenants of the Building to any mail chutes and boxes located in or on the Premises as required by any applicable rules of the United States Post Office; and (8) to close the Building after Standard Operating Hours, except that Tenant and its employees and invitees shall be entitled to admission at all times, under such regulations as Landlord prescribes for security purposes.

ARTICLE 20
ESTOPPEL CERTIFICATE

20.1 IN GENERAL

Within thirty (30) days after request therefor by Landlord, Mortgagee or any prospective mortgagee or owner, Tenant agrees as directed in such request to execute the proposed form of estoppel certificate (an "Estoppel Certificate") (which may require that such instrument be notarized), binding upon Tenant, certifying (i) that this Lease is unmodified and in full force and effect (or if there have been modifications, a description of such modifications and that this Lease as modified is in full force and effect); (ii) the dates to which Rent has been paid; (iii) that Tenant is in the possession of the Premises if that is the case; (iv) that Landlord is not in default under this Lease, or, if Tenant believes Landlord is in default, the nature thereof in detail; (v) that Tenant has no offsets or defenses to the performance of its obligations under this Lease (or if Tenant believes there are any offsets or defenses, a full and complete explanation thereof); (vi) that the Premises have been completed in accordance with the terms and provisions hereof or the Workletter, that Tenant has accepted the Premises and the condition thereof and of all improvements thereto and has no claims against Landlord or any other party with respect thereto (or if Tenant believes any of the foregoing is untrue, a full and complete explanation thereof); (vii) that if an assignment of rents or leases has been served upon Tenant by a Mortgagee, Tenant will acknowledge receipt thereof and agree to be bound by the provisions thereof; (viii) that Tenant will give to the Mortgagee copies of all notices required or permitted to be given by Tenant to Landlord; and (ix) to any other information reasonably requested.

20.2 ENFORCEMENT

In the event that Tenant fails to timely deliver an Estoppel Certificate, then such failure shall be a Default for which there shall be no cure or grace period. In addition to any other remedy available to Landlord, Landlord may impose a charge equal to Five Hundred Dollars ($500.00) for each day that Tenant fails to deliver an Estoppel Certificate; and (i) Tenant shall be bound to, and deemed to have irrevocably agreed to, the accuracy and truthfulness of the Estoppel Certificate delivered to Tenant, and (ii) Landlord, and any third party receiving such form of Estoppel Certificate, including a Mortgagee or purchaser, may rely upon the accuracy and truthfulness thereof.

ARTICLE 21
INTENTIONALLY DELETED

ARTICLE 22
REAL ESTATE BROKERS

Landlord and Tenant each represent to the other that it has not dealt with any real estate broker, sales person, or finder in connection with this Lease, and no such person initiated or participated in the negotiation of this Lease, or showed the Premises to Tenant. Tenant hereby agrees to indemnify, protect, defend and hold Landlord and the Indemnitees, and Landlord hereby agrees to indemnify, protect, defend and hold Tenant harmless from and against any and all liabilities and claims for commissions and fees arising out of a breach of the foregoing representation.

ARTICLE 23
MORTGAGEE PROTECTION

23.1 SUBORDINATION AND ATTORNMENT

This Lease is and shall be expressly subject and subordinate at all times to (i) any ground or underlying lease of the Real Property, now or hereafter existing, and all amendments, extensions, renewals and modifications to any such lease, and (ii) the lien of any mortgage or trust deed now or hereafter encumbering fee title to the Real Property and/or the leasehold estate under any such lease, and all amendments, extensions, renewals, replacements and modifications of such mortgage or trust deed and/or the obligation secured thereby, unless such ground lease or ground lessor, or mortgage, trust deed or Mortgagee, expressly provides or elects that this Lease shall be superior to such lease or mortgage or trust deed. If any such mortgage or trust deed is foreclosed (including any sale of the Real Property pursuant to a power of sale), or if any such lease is terminated, upon request of the Mortgagee or ground lessor, as the case may be, Tenant shall attorn to the purchaser at the foreclosure sale or to the ground lessor under such lease, as the case may be, provided, however, that such purchaser or ground lessor shall not be (i) bound by any payment of Rent for more than one (I) month in advance except payments in the nature of security for the performance by Tenant of its obligations under this Lease; (ii) subject to any offset, defense or damages arising out of a default of any obligations of any preceding Landlord; or **(iii)** bound by any amendment or modification of this Lease made without the written consent of the Mortgagee or ground lessor; or (iv) liable for any security deposits not actually received in cash by such purchaser or ground lessor. Notwithstanding the foregoing, Landlord agrees that upon written request from Tenant, Landlord shall request that any future Mortgagee provide a nondisturbance agreement to Tenant on such Mortgagee's standard form. In confirmation of such subordination, however, Tenant shall execute promptly any reasonable certificate or instrument that Landlord, Mortgagee or ground lessor may request. Tenant hereby constitutes Landlord as Tenant's attorney-in-fact to execute such certificate or instrument for and on behalf of Tenant upon Tenant's failure to do so within fifteen (15) days after a request to do so. Upon request by such successor in interest, Tenant shall execute and deliver reasonable instruments confirming the attornment provided for herein. The terms of this paragraph shall survive any termination of this Lease by reason of foreclosure.

23.2 MORTGAGEE PROTECTION

Tenant agrees to give any Mortgagee or ground lessor, by registered or certified mail, a copy of any notice of default served upon Landlord by Tenant, provided that prior to such notice Tenant has received notice (by way of service on Tenant of a copy of an assignment of rents and leases, or otherwise) of the address of such Mortgagee or ground lessor. Tenant further agrees that if Landlord shall have failed to cure such default within the time provided for in this Lease, then the Mortgagee or ground lessor shall have an additional thirty (30) days after receipt of notice thereof within which to cure such default or if such default cannot be cured within that time, then such additional notice time as may be necessary, if, within such thirty (30) days, any Mortgagee or ground lessor has commenced and is diligently pursuing the remedies necessary to cure such default (including commencement of foreclosure proceedings or other proceedings to acquire possession of the Real Property, if necessary to effect such cure). Such period of time shall be extended by any period within which such Mortgagee or ground lessor is prevented from commencing or pursuing such foreclosure proceedings or other proceedings to acquire possession of the Real Property by reason of Landlord's bankruptcy. Until the time allowed as aforesaid for Mortgagee or ground lessor to cure such defaults has expired without cure, Tenant shall have no right to, and shall not, terminate this Lease on account of default. This Lease may not be modified or amended so as to reduce the Rent or shorten the Term, or so as to adversely affect in any other respect to any material extent the rights of Landlord, nor shall this Lease be canceled or surrendered, without the prior written consent, in each instance, of the ground lessor or the Mortgagee. Landlord shall make commercially reasonable efforts to obtain from Landlord's current Mortgagee a form of non-disturbance agreement in favor of Tenant on Mortgagee's standard form, provided that Tenant shall pay any costs associated with obtaining such agreement (which costs shall not exceed Three Thousand Dollars ($3,000.00)) and in no event shall obtaining such agreement be a condition to Tenant's execution of or obligations under this Lease.

ARTICLE 24
NOTICES

(a) All notices, demands or requests provided for or permitted to be given pursuant to this Lease must be in writing and shall be personally delivered, sent by FedEx or other reputable overnight courier service, or mailed by first class, registered or certified United States mail, return receipt requested, postage prepaid.

(b) All notices, demands or requests to be sent pursuant to this Lease shall be deemed to have been properly given or served by delivering or sending the same in accordance with this Article 24, addressed to the parties hereto at their respective addresses listed in Section 1.1.

(c) Notices, demands or requests sent by mail or overnight courier service as described above shall be effective upon deposit in the mail or with such courier service. However, except with respect to a notice given under Code of Civil Procedure Section 1161 et seq., the time period in which a response to any such notice, demand or request must be given shall commence to run from (i) in the case of delivery by mail, the date of receipt on the return receipt of the notice, demand or request by the addressee thereof, or (ii) in the case of delivery by Federal Express or other overnight courier service, the date of acceptance of delivery by an employee, officer, director or partner of Landlord or Tenant. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given, as indicated by advice from Federal Express or other overnight courier service or by mail return receipt, shall be deemed to be receipt of notice, demand or request sent. Notices may also be served by personal service upon any officer, director or partner of Landlord or Tenant, and shall be effective upon such service.

(d) By giving to the other party at least thirty (30) days written notice thereof, either party shall have the right from time to time during the term of this Lease to change their respective addresses for notices, statements, demands and requests, provided such new address shall be within the United States of America.

ARTICLE 25
MISCELLANEOUS

25.1 LATE CHARGES

(a) All payments required hereunder (other than the Monthly Base Rent, Rent Adjustments, and Rent Adjustment Deposits, which shall be due as hereinbefore provided) to Landlord shall be paid within ten (10) business days after Landlord's written invoice therefor together with reasonable back-up information substantiating the invoiced payments. All such amounts (including Monthly Base Rent, Rent Adjustments, and Rent Adjustment Deposits) not paid when due shall bear interest from the date due until the date paid at the Default Rate in effect on the date such payment was due.

(b) In the event Tenant is more than five (5) days late in paying any installment of Rent due under this Lease, Tenant shall pay Landlord a late charge equal to five percent (5%) of the delinquent installment of Rent, provided, however, that Landlord agrees to waive the first such late charge in each calendar year during the Tenn. The parties agree that (i) such delinquency will cause Landlord to incur costs and expenses not contemplated herein, the exact amount of which will be difficult to calculate, including the cost and expense that will be incurred by Landlord in processing each delinquent payment of rent by Tenant, (ii) the amount of such late charge represents a reasonable estimate of such costs and expenses and that such late charge shall be paid to Landlord for each delinquent payment in addition to all Rent otherwise due hereunder. The parties further agree that the payment of late charges and the payment of interest provided for in subparagraph (a) above are distinct and separate from one another in that the payment of interest is to compensate Landlord for its inability to use the money improperly withheld by Tenant, while the payment of late charges is to compensate Landlord for its additional administrative expenses in handling and processing delinquent payments.

(c) Payment of interest at the Default Rate and/or of late charges shall not excuse or cure any default by Tenant under this Lease, nor shall the foregoing provisions of this Article or any such payments prevent Landlord from exercising any right or remedy available to Landlord upon Tenant's failure to pay Rent when due, including the right to terminate this Lease.

25.2 NO JURY TRIAL; VENUE; JURISDICTION

To the fullest extent permitted by Laws, each party hereto (which includes any assignee, successor, heir or personal representative of a party) shall not seek a jury trial, hereby waives trial by jury, and hereby further waives any objection to venue in the County in which the Project is located, and agrees and consents to personal jurisdiction of the courts of the State of California, in any action or proceeding or counterclaim brought by any party hereto against the other on any matter whatsoever arising out of or in any way connected with this Lease, the relationship of Landlord and Tenant, Tenant's use or occupancy of the Premises, or any claim of injury or damage, or the enforcement of any remedy under any statute, emergency or otherwise, whether any of the foregoing is based on this Lease or on tort law. No party will seek to consolidate any such action in which a jury has been waived with any other action in which a jury trial cannot or has not been waived. It is the intention of the parties that these provisions shall be subject to no exceptions. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

25.3 NO DISCRIMINATION

Tenant agrees for Tenant and Tenant's heirs, executors, administrators, successors and assigns and all persons claiming under or through Tenant, and this Lease is made and accepted upon and subject to the following conditions: that there shall be no discrimination against or segregation of any person or group of persons on account of race, color, creed, religion, sex, marital status, national origin or ancestry (whether in the leasing, subleasing, transferring, use, occupancy, tenure or enjoyment of the Premises or otherwise) nor shall Tenant or any person claiming under or through Tenant establish or permit any such practice or practices of discrimination or segregation with reference to the use or occupancy of the Premises by Tenant or any person claiming through or under Tenant.

25.4 FINANCIAL STATEMENTS

Within thirty (30) days after written request from Landlord from time to time during the Term, Tenant shall provide Landlord with current financial statements setting forth Tenant's financial condition and net worth for the most recent quarter, including balance sheets and statements of profits and losses. Such statements shall be prepared by an independent accountant and certified by Tenant's president, chief executive officer or chief financial officer. Landlord shall keep such financial information confidential and shall only disclose such information to Landlord's lenders, consultants, purchasers or investors, or other agents (who shall be subject to the same confidentiality obligations) on a need to know basis in connection with the administration of this Lease.

25.5 OPTION

This Lease shall not become effective as a lease or otherwise until executed and delivered by both Landlord and Tenant. The submission of this Lease to Tenant does not constitute a reservation of or option for the Premises, but when executed by Tenant and delivered to Landlord, this Lease shall constitute an irrevocable offer by Tenant in effect for fifteen (15) days to lease the Premises on the terms and conditions herein contained.

25.6 AUTHORITY

Tenant represents and warrants to Landlord that it has full authority and power to enter into and perform its obligations under this Lease, that the person executing this Lease on Tenant's behalf is fully empowered to do so, and that no consent or authorization is necessary from any third party.

Landlord represents and warrants to Tenant that it has full authority and power to enter into and perform its obligations under this Lease, that the person executing this Lease on Landlord's behalf is fully empowered to do so, and that no consent or authorization is necessary from any third party.

25.7 ENTIRE AGREEMENT

This Lease, the Exhibits, and Riders attached hereto contain the entire agreement between Landlord and Tenant concerning the Premises and there are no other agreements, either oral or written, and no other representations or statements, either oral or written, on which Tenant has relied. This Lease shall not be modified except by a writing executed by Landlord and Tenant.

25.8 MODIFICATION OF LEASE FOR BENEFIT OF MORTGAGEE

If Mortgagee of Landlord requires a modification of this Lease which shall not result in any increased cost or expense to Tenant or in any other substantial and adverse change in the rights and obligations of Tenant hereunder, then Tenant agrees that this Lease may be so modified.

25.9 EXCULPATION

Tenant agrees, on its behalf and on behalf of its successors and assigns, that any liability or obligation under this Lease shall only be enforced against Landlord's equity interest in the Property and in no event against any other assets of Landlord, or Landlord's members, officers, directors or partners, and that any liability of Landlord with respect to this Lease shall be so limited and Tenant shall not be entitled to any judgment in excess of such amount. Notwithstanding anything to the contrary contained herein, in no event shall Landlord be liable to Tenant for consequential, punitive or special damages with respect to this Lease.

25.10 ACCORD AND SATISFACTION

No payment by Tenant or receipt by Landlord of a lesser amount than any installment or payment of Rent due shall be deemed to be other than on account of the amount due, and no endorsement or statement on any check or any letter accompanying any check or payment of Rent shall be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or payment of Rent or pursue any other remedies available to Landlord. No receipt of money by Landlord from Tenant after the termination of this Lease or Tenant's right of possession of the Premises shall reinstate, continue or extend the Term. Receipt or acceptance of payment from anyone other than Tenant, including an assignee of Tenant, is not a waiver of any breach of Article 10, and Landlord may accept such payment on account of the amount due without prejudice to Landlord's right to pursue any remedies available to Landlord.

25.11 LANDLORD'S OBLIGATIONS ON SALE OF BUILDING

In the event of any sale or other transfer of the Building, Landlord shall be entirely freed and relieved of all agreements and obligations of Landlord hereunder accruing or to be performed after the date of such sale or transfer, and any remaining liability of Landlord with respect to this Lease shall be limited to the amount described in Section 25.9 and Tenant shall not be entitled to any judgment in excess of such amount. Landlord shall have the right to assign this Lease to an entity comprised of the principals of Landlord or any Landlord Affiliate provided the same assume all of the assigning Landlord's obligations under this Lease. Upon such assignment and assumption of the obligations of Landlord hereunder, Landlord shall be entirely freed and relieved of all obligations hereunder.

25.12 BINDING EFFECT

Subject to the provisions of Article 10, this Lease shall be binding upon and inure to the benefit of Landlord and Tenant and their respective heirs, legal representatives, successors and permitted assigns.

25.13 CAPTIONS

The Article and Section captions in this Lease are inserted only as a matter of convenience and in no way define, limit, construe, or describe the scope or intent of such Articles and Sections.

25.14 TIME; APPLICABLE LAW; CONSTRUCTION

Time is of the essence of this Lease and each and all of its provisions. This Lease shall be construed in accordance with the Laws of the State of California. If more than one person signs this Lease as Tenant, the obligations hereunder imposed shall be joint and several. If any term, covenant or condition of this Lease or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, covenant or condition to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each item, covenant or condition of this Lease shall be valid and be enforced to the fullest extent permitted by Law. Wherever the word “including” or “includes” is used in this Lease, it shall have the same meaning as if followed by the phrase “but not limited to”. Wherever the word “day” or “days” is used in this Lease, it shall mean a calendar day or calendar days unless immediately preceded by the word “Business”, in which event it shall mean a Business Day or Business Days. The language in all parts of this Lease shall be construed according to its normal and usual meaning and not strictly for or against either Landlord or Tenant.

25.15 ABANDONMENT

In the event Tenant abandons the Premises but is otherwise in compliance with all the terms, covenants and conditions of this Lease, Landlord shall (i) have the right to enter into the Premises in order to show the space to prospective tenants, (ii) have the right to reduce the services provided to Tenant pursuant to the terms of this Lease to such levels as Landlord reasonably determines to be adequate services for an unoccupied premises, and (iii) during the last six (6) months of the Term, have the right to prepare the Premises for occupancy by another tenant upon the end of the Term. Tenant expressly acknowledges that in the absence of written notice pursuant to Section 11.2(b) or pursuant to California Civil Code Section 1951.3 terminating Tenant’s right to possession, none of the foregoing acts of Landlord or any other act of Landlord shall constitute a termination of Tenant’s right to possession or an acceptance of Tenant’s surrender of the Premises, and this Lease shall continue in effect.

25.16 LANDLORD’S RIGHT TO PERFORM TENANT’S DUTIES

If Tenant fails timely to perform any of its duties under this Lease beyond applicable notice and cure periods, Landlord shall have the right (but not the obligation), to perform such duty on behalf and at the expense of Tenant with prior written notice to Tenant, and all sums expended or expenses incurred by Landlord in performing such duty shall be deemed to be additional Rent under this Lease and shall be due and payable upon receipt of Landlord’s invoice therefor together with reasonable back-up documentation.

25.17 SECURITY SYSTEM

Landlord, in its sole and absolute discretion, shall install certain card key access and video camera systems respecting certain main entry points of the Building. Subject to the foregoing, Landlord shall not be obligated to provide or maintain any security patrol or security system. Landlord shall not be responsible for the quality of any such patrol or system which may be provided hereunder or for damage or injury to Tenant, its employees, invitees or others due to the failure, action or inaction of such patrol or system.

25.18 NO LIGHT, AIR OR VIEW EASEMENTS

Any diminution or shutting off of light, air or view by any structure which may be erected on lands of or adjacent to the Project shall in no way affect this Lease or impose any liability on Landlord.

25.19 RECORDATION

Neither this Lease, nor any notice nor memorandum regarding the terms hereof, shall be recorded by Tenant. Any such unauthorized recording shall be a Default for which there shall be no cure or grace period. Tenant agrees to execute and acknowledge, at the request of Landlord, a memorandum of this Lease, in recordable form.

25.20 SURVIVAL

The waivers of the right of jury trial, the other waivers of claims or rights, the releases and the obligations of Tenant under this Lease to indemnify, protect, defend and hold harmless Landlord and/or indemnitees shall survive the expiration or termination of this Lease, and so shall all other obligations or agreements which by their terms survive expiration or termination of this Lease.

25.21 OFAC

(a) Tenant hereby represents and warrants to Landlord, either that (i) Tenant is regulated by the SEC, FINRA or the Federal Reserve (a "Regulated Entity") or (ii) neither Tenant nor any person or entity that directly or indirectly (A) controls Tenant or (B) has an ownership interest in Tenant of twenty-five percent (25%) or more, appears on the list of Specially Designated Nationals and Blocked Persons ("OFAC List") published by the Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury.

(b) Landlord advises Tenant hereby that the purpose of this Section is to provide to Landlord information and assurances to enable Landlord to comply with the Laws relating to OFAC.

(c) Tenant acknowledges that the breach of the representation and warranty by Tenant under Section 25.21(a) shall be an immediate Default under this Lease.

25.22 INSPECTION BY A CASP IN ACCORDANCE WITH CIVIL CODE SECTION 1938.

Landlord discloses that to Landlord's knowledge, neither the Building nor the Premises have undergone inspection by a Certified Access Specialist. Furthermore, pursuant to Section 1938 of the California Civil Code, Landlord notifies Tenant of the following: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although California state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of any such CASp inspection, the payment of the costs and fees for the CASp inspection and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the Premises." Tenant agrees that (a) Tenant may, at its option and at its sole cost, cause a CASp to inspect the Premises and determine whether the Premises complies with all of the applicable construction-related accessibility standards under California law, (b) the parties shall mutually coordinate and reasonably approve of the timing of any such CASp inspection so that Landlord may, at its option, have a representative present during such inspection, and (c) Tenant shall be solely responsible for the cost of any repairs necessary to correct violations of construction-related accessibility standards within the Premises and Building identified by any such CASp inspection, any and all such alterations and repairs within the Premises to be performed by Tenant shall be subject to Landlord's consent and in accordance with this Lease. Landlord and Tenant hereby agree that if Tenant elects to perform a CASp inspection of the Premises, Tenant will provide written notice to Landlord, and Landlord may elect, in Landlord's sole discretion, lo retain a CASp to perform the inspection. If Landlord does not so elect, the time and manner of the CASp inspection is subject to the prior written approval of Landlord. In either event, the payment of the fee for the CASp inspection shall be borne by Tenant.

25.23 COUNTERPARTS

This Lease may be executed in any number of counterparts, each of which shall be deemed an original, but all of which, together, shall constitute one and the same instrument. Telecopied signatures or signatures transmitted by electronic mail in so-called "pdf' format or via DocuSign or similar electronic means, may be used in place of original signatures on this Lease. Landlord and Tenant intend to be bound by the signatures on the telecopied or e-mailed document, are aware that the other party will rely on the telecopied or e-mailed signatures, and hereby waive any defenses to the enforcement of the terms of this Lease based on such telecopied or e-mailed signatures. Promptly following request by either party, the other party shall provide the requesting party with original signatures on this Lease.

25.24 EXHIBITS AND RIDERS

All exhibits, riders and/or addenda referred to in this Lease as an exhibit, rider, or addenda hereto, or attached hereto, are hereby incorporated into and made a part of this Lease.

[Signatures on Following Page]

IN WITNESS WHEREOF, this Lease has been executed as of the date set forth in Section 1.1 hereof.

TENANT:

CARIBOU BIOSCIENCES, INC.,
a Delaware corporation

By: /s/ Rachel E. Haurwitz

Print Name: Rachel E. Haurwitz

Its: /s/ President and CEO

By: /s/ Barbara G. McClung

Print Name: Barbara G. McClung

Its: Chief Legal Officer and Secretary

LANDLORD:

2929 SEVENTH ST., LLC,
a California limited liability company

By: Wareham-NZL, LLC, its Manager

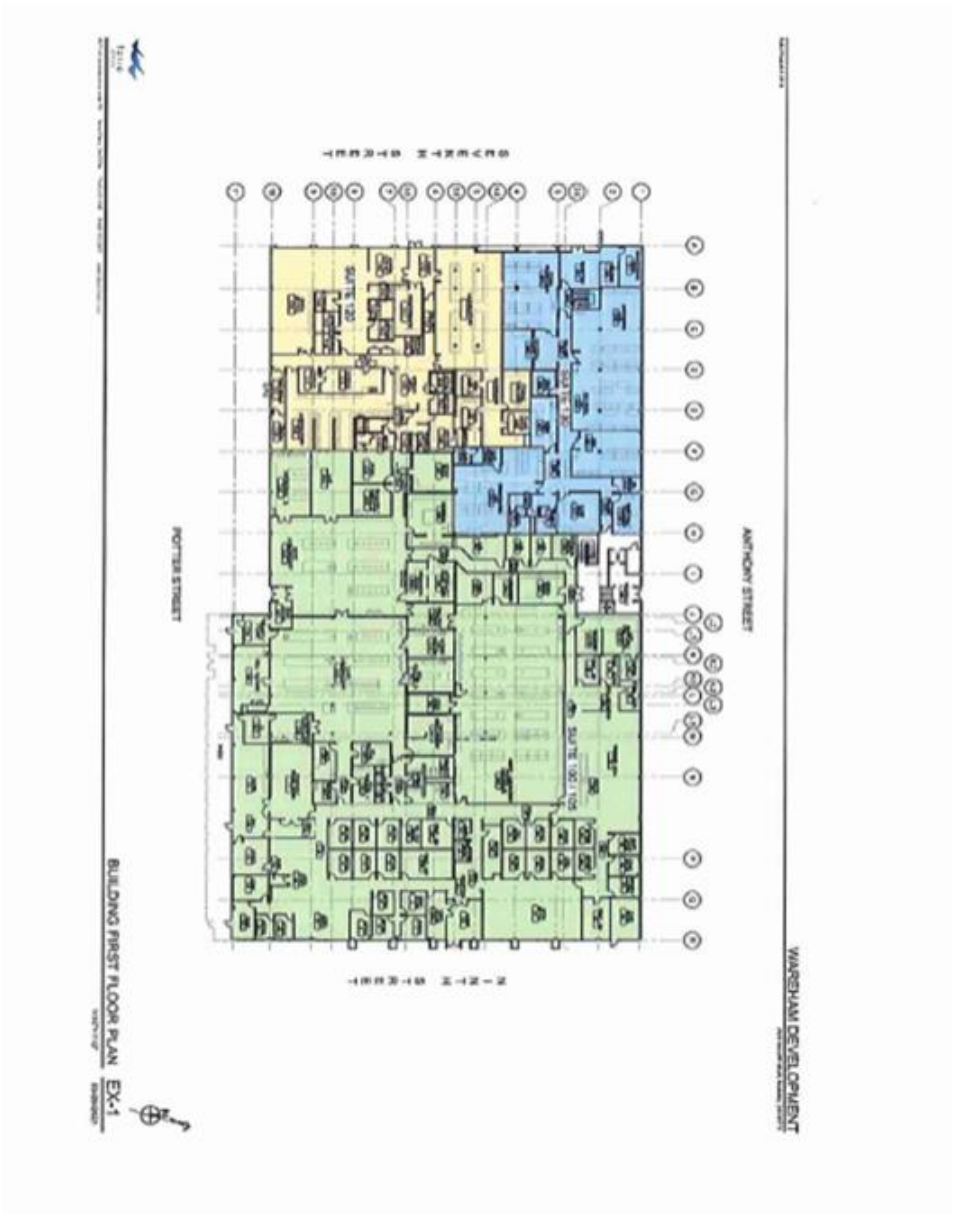
By: /s/ Richard K. Robbins

Name: Richard K. Robbins

Its: Manger

EXHIBIT A

OUTLINE OF PREMISES



Suite 120:

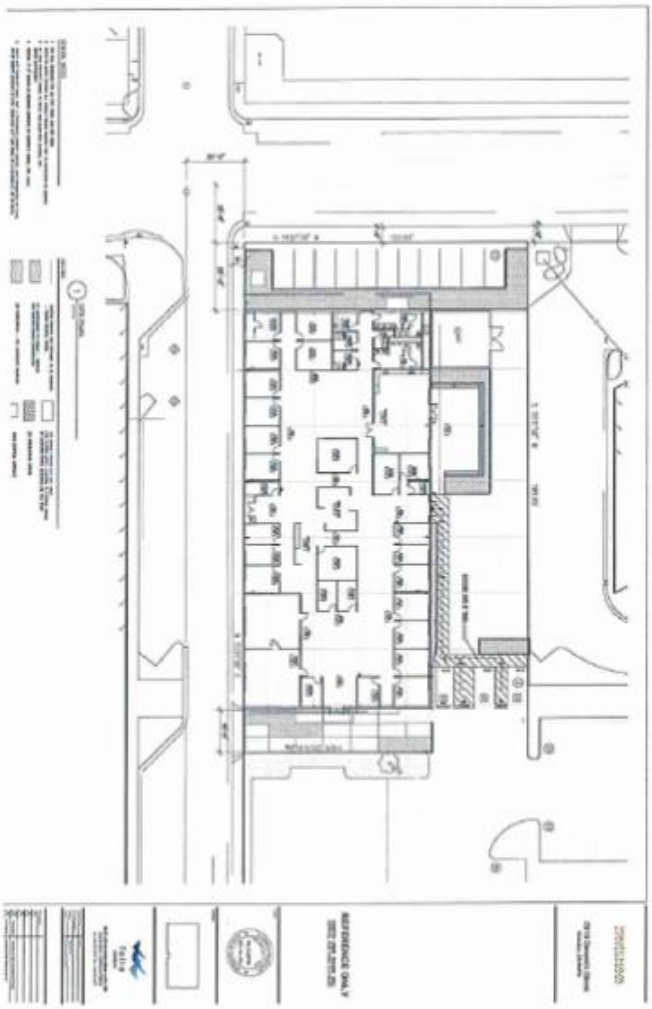
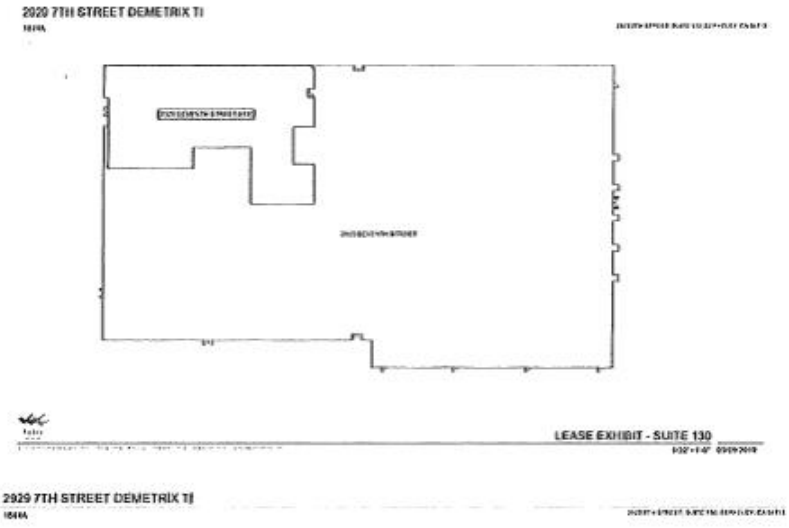
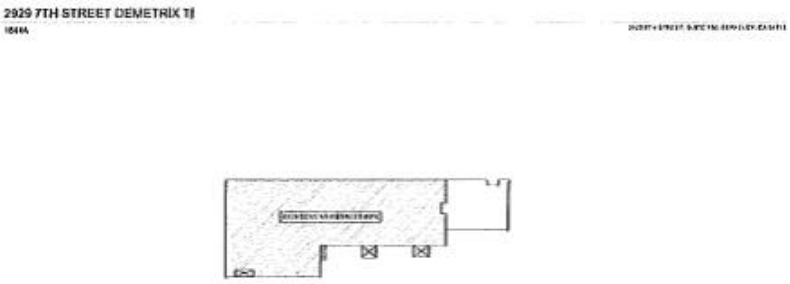


EXHIBIT A-1

OUTLINE OF OFFERING SPACES





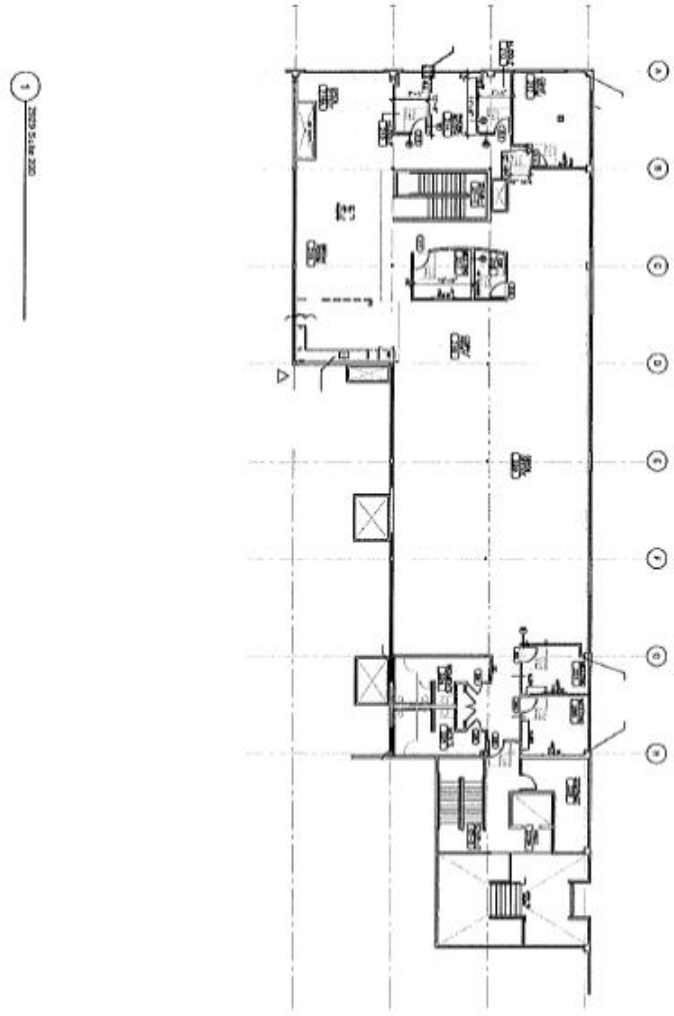


EXHIBIT A-2

PARKING AREAS

EXHIBIT B

WORKLETTER AGREEMENT

THIS WORK AGREEMENT (this "Work Agreement") is attached to and made a part of that certain Lease (the "Lease") between 2929 Seventh St., LLC ("Landlord") and Caribou Biosciences, Inc. ("Tenant"). All capitalized terms used but not defined herein shall have the respective meanings given such terms in the Lease. This Work Agreement sets forth the terms and conditions relating to the construction of the Tenant Work (defined below) in Suite 120.

1. Allowance; Tenant Work.

(a) Allowance. Tenant shall be entitled to the Suite 120 Tenant Improvement Allowance for the costs relating to the design, permitting and construction of Tenant's improvements which are affixed to Suite 120 (the "Tenant Work"). Notwithstanding the provisions of Section 12(d) of the Existing Lease First Amendment to the contrary, Tenant shall be responsible for the construction of any "pass-through" entry between Suites 105 and 120 as part of Tenant Work, at Tenant's sole cost, subject to the Suite 120 Tenant Improvement Allowance. In no event will Landlord be obligated to make disbursements pursuant to this Work Agreement in a total amount which exceeds the Suite 120 Tenant Improvement Allowance. Tenant must complete all Tenant Work and have submitted Payment Request Supporting Documentation (defined below) for such work, in each case subject to day for day extension due to Force Majeure, no later than November 30, 2022, in order to be entitled to receive the Suite 120 Tenant Improvement Allowance for such work.

(b) Disbursement of the Suite 120 Tenant Improvement Allowance.

(i) Suite 120 Tenant Improvement Allowance Items. Except as otherwise set forth in this Work Agreement, the Suite 120 Tenant Improvement Allowance shall be disbursed by Landlord only for the following items and costs (collectively the "Suite 120 Tenant Improvement Allowance Items"):

(A) Payment of the fees of the Architect and the Building Consultants (as those terms are defined below) and payment of fees and costs reasonably incurred by Landlord for the review of the Construction Drawings (defined below) by Landlord's third party consultants;

(B) The payment of plan check, permit and license fees relating to the Tenant Work;

(C) The cost of construction of the Tenant Work, including, without limitation, after hours charges, testing and inspection costs, freight elevator usage, trash removal costs, and contractors' fees and general conditions;

(D) The cost of any changes to the Building when such changes are required by the Construction Drawings, such cost to include all direct architectural and/or engineering fees and expenses incurred in connection therewith;

(E) The cost of installation of window film and security systems, which costs may be reimbursed upon providing the documentation (including lien releases) required in Paragraph 1(b)(ii) below, if such installation is not performed by Contractor (defined below);

(F) The cost of any changes to the Construction Drawings (defined below) or Tenant Work required by applicable building codes (collectively, "Code"); and

(G) The Coordination Fee (defined below).

(ii) Disbursement of Suite 120 Tenant Improvement Allowance. During the design and construction of the Tenant Work, Landlord shall make monthly disbursements of the Suite 120 Tenant Improvement Allowance to reimburse Tenant for Suite 120 Tenant Improvement Allowance Items and shall authorize the release of funds as follows.

(A) On or before the fifth (5th) day of each calendar month (or such other date as Landlord may designate), Tenant shall deliver to Landlord: (1) a request for payment from Contractor approved by Tenant and the Architect (hereafter defined), in a commercially reasonable form to be provided or approved in advance by Landlord, including a schedule of values and showing the percentage of completion, by trade, of the Tenant Work, which details the portion of the work completed and the portion not completed; (2) an invoice from the Contractor for labor rendered and materials delivered to Suite 120; and (3) executed conditional mechanic's lien releases from all of Tenant's Construction Parties (defined below) who have lien rights with respect to the subject request for payment (along with unconditional mechanics' lien releases with respect to payments made pursuant to Tenant's prior submission hereunder) in compliance with all applicable laws (collectively, the "Payment Request Supporting Documentation").

(B) Within forty (40) days after Tenant's delivery to Landlord of all Payment Request Supporting Documentation, Landlord shall deliver to Tenant payment in an amount equal to the lesser of: (x) the amount so requested by Tenant, as set forth above, less (1) the applicable Over-Suite 120 Tenant Improvement Allowance Amount (defined in Section 3.2(a) below and (2) a ten percent (10%) retention (the aggregate amount of such retentions to be known as the "Final Retention"), and (y) the balance of any remaining portion of the Suite 120 Tenant Improvement Allowance (not including the Final Retention), provided that if Landlord reasonably disputes any item in a request for payment based on non-compliance of any work with the Approved Working Drawings (defined below) or due to any substandard work and delivers a written objection to such item setting forth with reasonable particularity Landlord's reasons for its dispute (a "Draw Dispute Notice") within ten (I 0) Business Days following Tenant's submission of its Payment Request Supporting Documentation, Landlord may deduct the amount of such disputed item from the payment. Landlord and Tenant shall, in good faith, endeavor to diligently resolve any such dispute. Landlord's payment of such amounts shall not be deemed Landlord's approval or acceptance of the work furnished or materials supplied as set forth in Tenant's payment request.

(C) Subject to the provisions of this Work Agreement, following the final completion of construction of the Tenant Work, Landlord shall deliver to Tenant a check made payable to Tenant, or a check or checks made payable to another patty or patties as reasonably requested by Tenant, in the amount of the Final Retention, provided that (1) Tenant delivers to Landlord properly executed unconditional mechanics' lien releases from all of Tenant's Construction Parties in compliance with all applicable laws, as reasonably determined by Landlord; (2) Landlord has determined in good faith that no substandard work exists which adversely affects the mechanical, electrical, plumbing, heating, ventilating and air conditioning, life-safety or other systems of the Building, the curtain wall of the Building, the structure or exterior appearance of the Building; (3) Architect delivers to Landlord a certificate, in a form finally completed; (4) Tenant supplies Landlord with evidence that all governmental approvals required for an occupant to legally occupy Suite 120 has been obtained; and (5) Tenant has fulfilled its Completion Obligations (defined below).

2. Construction Drawings

(a) Selection of Architect; Construction Drawings.

(i) Tenant shall retain an architect approved in writing, in advance by Landlord, such approval not to be unreasonably withheld, conditioned or delayed (the "Architect") to prepare the Construction Drawings. Tenant shall retain engineering consultants approved in writing, in advance by Landlord, such approval not to be unreasonably withheld (the "Building Consultants") to prepare all plans and engineering working drawings and perform all work relating to mechanical, electrical and plumbing ("MEP"), HVAC/Air Balancing, life-safety, structural, sprinkler and riser work.

(ii) The plans and drawings to be prepared by Architect and the Building Consultants hereunder (i.e., both the Space Plan and the Working Drawings, as each term is defined below) shall be known collectively as the "Construction Drawings." All Construction Drawings shall comply with the drawing format and specifications reasonably determined or approved by Landlord and shall be subject to Landlord's prior written

approval, not to be unreasonably withheld, conditioned or delayed. All MEP drawings must be fully engineered or prepared on a "design-build-assist" basis with a Landlord-approved MEP basis of design ("BOD"), as prepared by an approved MEP engineer consultant. The MEP drawings cannot be prepared on a strictly "design-build" basis. Landlord's review of the Construction Drawings shall be for its sole purpose and shall not obligate Landlord to review the same, for quality, design, Code compliance or other like matters. Accordingly, notwithstanding that any Construction Drawings are reviewed by Landlord or its space planner, architect, engineers and consultants, and notwithstanding any advice or assistance which may be rendered to Tenant by Landlord or Landlord's space planner, architect, engineers, and consultants, Landlord shall have no liability whatsoever in connection therewith and shall not be responsible for any omissions or errors contained in the Construction Drawings.

(b) Space Plan. Tenant shall supply Landlord for Landlord's review and approval with a copy (which may be in electronic form) of its space plan for Suite 120 ("Space Plan") before any architectural working drawings or engineering drawings have been commenced. The Space Plan shall include a layout and designation of all laboratory facilities, offices, rooms and other partitioning, their intended use, and equipment to be contained therein. Landlord may request clarification or more specific drawings for special use items not included in the Space Plan. Landlord shall advise Tenant within ten (10) Business Days after Landlord's receipt of the Space Plan (or, if applicable, such additional information requested by Landlord pursuant to the provisions of the immediately preceding sentence) if the same is approved or is unsatisfactory or incomplete in any respect. Upon any disapproval by Landlord, Tenant shall promptly cause the Space Plan to be revised to correct any deficiencies or other matters Landlord may reasonably require.

(c) Working Drawings. After the Space Plan has been approved by Landlord, Tenant shall supply the Architect and the Building Consultants with a complete listing of standard and electrical requirements and special electrical receptacle requirements, to enable the Architect and the Building Consultants to complete the Working Drawings and shall cause the Architect and the Engineers to promptly complete the architectural and engineering drawings, and Architect shall compile a fully coordinated set of drawings, including, as applicable, depending on the nature of the Tenant Work, architectural, structural, mechanical, electrical, plumbing, fire sprinkler and life safety in a form which is complete to allow subcontractors to bid on the work and to obtain all applicable permits (collectively, the "Working Drawings") and shall submit the same to Landlord for Landlord's review and approval. Tenant shall supply Landlord with a copy (which may be in electronic form), and at least one (I) "hard" copy (which may be a half-sized set), of the Working Drawings. Landlord shall advise Tenant within ten (10) Business Days after Landlord's receipt of the Working Drawings if Landlord, in good faith, determines that the same are approved or are unsatisfactory or incomplete. If Tenant is so advised, Tenant shall promptly revise the Working Drawings to correct any deficiencies or other matters Landlord may reasonably require.

(d) Landlord's Approval. Tenant acknowledges that it shall be deemed reasonable for Landlord to disapprove the Space Plan and any subsequent Working Drawings unless, at a minimum, the same are prepared on the basis that the sprinkler systems shall be designed in compliance with the specifications provided by FM Global. Additionally, Landlord's approval of any matter under this Work Agreement may be withheld if Landlord reasonably determines that the same would violate any provision of the Lease or this Work Agreement or would materially and adversely affect the mechanical, electrical, plumbing, heating, ventilating and air conditioning, life-safety or other systems of the Building, the curtain wall of the Building, the structure or exterior appearance of the Building.

3. Construction of the Tenant Work

(a) Tenant's Selection of Contractors.

(i) The Contractor. Tenant shall retain Rossi Builders to construct the Tenant Work (the "Contractor").

(ii) Tenant's Construction Parties. All subcontractors, laborers, materialmen, and suppliers used by Tenant (such subcontractors, laborers, materialmen, and suppliers, and the Contractor to be known collectively as "Tenant's Construction Parties") must be approved in writing by Landlord, in Landlord's reasonable discretion, provided that Landlord will require Tenant to retain the Building Consultants, if applicable. All of Tenant's Construction Parties shall be licensed in the State of California.

(b) Construction of Tenant Work by Tenant's Construction Parties.

(i) Construction Contract. Prior to Tenant's execution of the construction contract and general conditions with Contractor (the "Contract"), Tenant shall submit the Contract to Landlord for its approval, which approval shall not be unreasonably withheld or delayed. Prior to the commencement of the construction of the Tenant Work, Tenant shall provide Landlord with a schedule of values consisting of a detailed breakdown, by trade, of the final costs to be incurred or which have been incurred, for all Suite 120 Tenant Improvement Allowance Items in connection with the design and construction of the Tenant Work, which costs form the basis for the amount of the Contract ("Final Costs"). Prior to the commencement of construction of the Tenant Work, difference between the amount of the Final Costs and the amount of the Suite 120 Tenant Improvement Allowance (less any portion thereof already disbursed by Landlord, or in the process of being disbursed by Landlord, on or before the commencement of construction of the Tenant Work), and Landlord will reimburse Tenant on a monthly basis, as described in Section 1.2(b)(ii) above, for a percentage of each amount requested by the Contractor or otherwise to be disbursed under this Work Agreement, which percentage shall be equal to the Suite 120 Tenant Improvement Allowance divided by the amount of the Final Costs (after deducting from the Final Costs any amounts expended in connection with the preparation of the Construction Drawings, and the cost of all other Suite 120 Tenant Improvement Allowance Items incurred prior to the commencement of construction of the Tenant Work), and Tenant shall be solely responsible for any Over- Allowance Amount. If, after the Final Costs have been initially determined, the costs relating to the design and construction of the Tenant Work shall change, any additional costs for such design and construction in excess of the Final Costs shall be added to the Over-Allowance Amount and the Final Costs, and Landlord's reimbursement percentage, shall be recalculated in accordance with the terms of the immediately preceding sentence. Notwithstanding anything set forth herein to the contrary, construction of the Tenant Work shall not commence until Tenant has procured and delivered to Landlord a copy of all Permits for the applicable Tenant Work.

(ii) Construction Requirements.

(A) Landlord's General Conditions for Tenant's Contractor and the Tenant Work. Construction of the Tenant Work shall comply with the following: (I) the Tenant Work shall be constructed in strict accordance with the Approved Working Drawings and Landlord's then-current published construction guidelines; and (2) Tenant shall abide by all reasonable rules made by Landlord's building manager with respect to the use of contractor parking, materials delivery, freight, loading dock and service elevators, any required shutdown of utilities (including life-safety systems), storage of materials, coordination of work with the contractors of Landlord, and any other matter in connection with this Work Agreement, including, without limitation, the construction of the Tenant Work. Tenant shall pay an oversight and supervisory fee (the "Coordination Fee") to Landlord in an amount equal to three percent (3%) of the "hard" portion of the Final Costs.

(B) Indemnity. Tenant's indemnity of Landlord as set forth in the Lease shall also apply with respect to any and all costs, losses, damages, injuries and liabilities related in any way to any act or omission of Tenant or Tenant's Construction Parties, or anyone directly or indirectly employed by any of them, or in connection with Tenant's non-payment of any amount arising out of the Tenant Work and/or Tenant's disapproval of all or any portion of any request for payment.

(C) Requirements of Contractor. Tenant's Contractor shall guarantee to Tenant and for the benefit of Landlord that the portion of the Tenant Work for which it is responsible shall be free from any defects in workmanship and materials for a period of not less than one (I) year from the date of completion thereof. Tenant's Contractor shall be responsible for the replacement or repair, without additional charge, of all work done or furnished in accordance with its contract that shall become defective within one (I) year after the completion of the work performed by Contractor. The correction of such work shall include, without additional charge, all additional expenses and damages incurred in connection with the removal or replacement of all or any part of the Tenant Work, and/or the Building and/or common areas that is damaged or disturbed thereby. All such warranties or guarantees as to materials or workmanship of or with respect to the Tenant Work shall be contained in the Contract and shall be written such that such guarantees or warranties shall inure to the benefit of both Landlord and Tenant, as their respective interests may appear, and can be directly enforced by either. Tenant covenants to give to Landlord any assignment or other assurances as may be reasonably necessary to effect such right of direct enforcement.

(iii) Insurance Requirements.

(A) General Coverages. All of Tenant's Construction Parties shall carry employer's liability and worker's compensation insurance covering all of their respective employees, and shall also carry commercial general liability insurance, including personal and bodily injury, property damage and completed operations liability, all with limits, in form and with companies as are required to be carried by Tenant as set forth in the Lease.

(B) Special Coverages. Tenant or Contractor shall carry "Builder's All Risk" insurance in an amount approved by Landlord covering the construction of the Tenant Work, and such other insurance as Landlord may require, it being understood and agreed that the Tenant Work shall be insured by Tenant pursuant to the Lease immediately upon completion thereof. Such insurance shall be in amounts and shall include such extended coverage endorsements as may be reasonably required by Landlord, and shall be in form and with companies as are required to be carried by Tenant as set forth in the Lease.

(C) General Terms. Certificates for all of the foregoing insurance coverage shall be delivered to Landlord before the commencement of construction of the Tenant Work and before the Contractor's equipment is moved onto the site. Tenant's Construction Parties shall maintain all of the foregoing insurance coverage in force until its portion of the Tenant Work is fully completed, except for any Products and Completed Operations Coverage insurance required of Contractor by Landlord, which is to be maintained for one (1) year following completion of the work and acceptance by Landlord and Tenant. All commercial general liability policies required under this Section shall name Landlord and Wareham Property Group as additional insureds. All insurance, required of Tenant's Construction Parties under this Section, except Workers' Compensation, shall preclude subrogation claims by the insurer against anyone insured thereunder, and shall provide that it is primary insurance as respects Landlord and Tenant and that any other insurance maintained by Landlord or Tenant is excess and noncontributing with the insurance required hereunder. The requirements for the foregoing insurance shall not derogate from the provisions for indemnification of Landlord by Tenant under the Lease and/or this Work Agreement.

(iv) Governmental Compliance. The Tenant Work shall comply in all respects with the following: (A) the Code and other federal, state, city and/or quasi-governmental laws, codes, ordinances and regulations, as each may apply according to the rulings of the controlling public official, agent or other person or entity (collectively, "Legal Requirements"); and (B) building material manufacturer's specifications, if any, received by Tenant with respect to the Tenant Work.

(v) Inspection by Landlord. Prior to substantial completion of the Tenant Work, Landlord shall have the right, without delaying the prosecution of the Tenant Work, to inspect the same upon reasonable prior written notice to Tenant, provided however, that Landlord's hereunder nor shall Landlord's inspection of the Tenant Work constitute Landlord's approval of the same. Should Landlord disapprove any portion of the Tenant Work, such disapproval shall be limited to non-conformance of the Tenant Work with Legal Requirements and/or the Approved Working Drawings, and Landlord shall notify Tenant in writing of such disapproval and shall specify the non-conformance with Legal Requirements and/or the Approved Working Drawings. Any such non-conforming items disapproved by Landlord shall be promptly rectified by Tenant at no expense to Landlord.

(vi) Meetings. Tenant shall hold periodic meetings at a reasonable time with the Contractor regarding the progress of the Tenant Work, and Landlord and/or its agents shall receive prior written notice of, and shall have the right to attend, all such meetings. Minutes may be taken at all such meetings, and Landlord will be included in the distribution list for such minutes. One such meeting each month shall include the review of Contractor's current request for payment.

(c) Notice of Completion; Copy of Record Set of Plans. Within thirty (30) days after completion of construction of the Tenant Work, Tenant shall cause a Notice of Completion to be recorded in the office of the Recorder of Alameda. Within sixty (60) days following the completion of construction, (i) Tenant shall cause the Architect (A) to update the Approved Working Drawings as necessary to reflect all changes made to the Approved Working Drawings during the course of construction, (B) to certify to its knowledge that the updated drawings are true and correct, and (C) to deliver to Landlord such updated drawings in accordance with Landlord's then-current CAD requirements, and (ii) Tenant shall deliver to Landlord a copy of all warranties, guaranties, and operating manuals, if any, in Tenant's possession relating to the Tenant Work. Tenant's obligations set forth in this Section are collectively referred to as the "Completion Obligations."

4. Landlord Work. Tenant shall accept possession of Suite 120 on the terms set forth in Section 2.4 of the Lease; provided, however, that prior to tendering possession of Suite 120 to Tenant, Landlord shall patch and paint (using Building standard colors and materials) any holes in the walls of Suite 120 that are in excess of the size that would be considered part of ordinary wear and tear", as reasonably determined by Landlord.

5. Miscellaneous.

(a) Tenant's Representative. Tenant has designated Cindy Hayashi as its sole representative with respect to the matters set forth in this Work Agreement, until further notice to Landlord, who shall have full authority and responsibility to act on behalf of Tenant as required in this Work Agreement.

(b) Landlord's Representative. Landlord has designated Lisa Vogel as its sole representative with respect to the matters set forth in this Work Agreement, who, until further notice to Tenant, shall have full authority and responsibility to act on behalf of Landlord as required in this Work Agreement.

(c) Tenant's Default. Notwithstanding any provision to the contrary contained in the Lease, if a Default by Tenant under the Lease (including, without limitation, this Work Agreement) has occurred at any time on or before the substantial completion of the Tenant Work, then (i) in addition to all other rights and remedies granted to Landlord pursuant to the Lease, Landlord shall Allowance, and (ii) all other obligations of Landlord under the terms of this Work Agreement shall be deferred until such time as such Default is cured pursuant to the terms of the Lease.

EXHIBIT C-1

LABORATORY RULES AND REGULATIONS

1. Any laboratory equipment (glass and cage washers, sterilizers, centrifuges, etc.) being used during Standard Operating Hours must be properly insulated for noise to prevent interruption of other tenants' business. Landlord reserves the right to request all equipment be insulated prior to occupancy. Should other tenants complain of unreasonable levels of noise from the laboratory tenant's laboratory operations, the laboratory tenant will be responsible for abating any unreasonable noise levels, at the laboratory tenant's sole cost.

2. Subject to the terms of the laboratory tenant's lease with Landlord (including any Landlord waivers or releases of subrogation and other claims relating to property damage), any damage to property due to leaks from the laboratory tenant's laboratory equipment will be the sole responsibility of the laboratory tenant. Should damage occur in other tenant spaces due to such leaks, any and all damages and clean-up will be the responsibility of the laboratory tenant.

3. Animal activities are a recognized and necessary process in the biotech industry. Such activities may only be conducted by laboratory tenants pursuant to all the requirements of their respective lease (including any "Use" clause) and require specific, written approval by Landlord in advance. Any animal activities shall be conducted pursuant to all regulations, standards and best industry practices relating to them.

4. The Project is a mixed-use facility, and laboratory tenants share space with office tenants. To reduce the potential interaction with office tenants and their employees and visitors with any biotech animal operations, any animal testing performed, any deliveries of animals and any equipment, foods, cleaners, etc. associated with animal activities, must be coordinated through the loading dock after hours and with the cooperation of the building management and security personnel. The laboratory tenant should make every effort to handle any deliveries relating to animal activities outside of Standard Operating Hours. The freight elevator, if any, must be used at all times. No cartons, containers or cardboard boxes bearing the nature of contents may be stored or left in common area spaces, including any garage/freight areas. Feed bags, animal carriers, and any and all other related containers must be disposed of properly and with discretion.

5. All exterior signage relating to laboratory operations (i.e., visible to common areas, including corridors) must be kept to the minimum required by Laws. To the extent provided in the laboratory tenant's lease, all signs must have Landlord's approval prior to installation.

EXHIBIT C-2

RULES AND REGULATIONS

1. No sidewalks, entrance, passages, courts, elevators, vestibules, stairways, corridors or halls shall be obstructed or encumbered by Tenant or used for any purpose other than ingress and egress to and from the Premises.

2. No awning or other projection shall be attached to the outside walls or windows of the Project without the prior written consent of Landlord. No curtains, blinds, shades, drapes or screens shall be attached to or hung in, or used in connection with any window or door of the Premises, without the prior written consent of Landlord. Such awnings, projections, curtains, blinds, shades, drapes, screens and other fixtures must be of a quality, type, design, color, material and general appearance approved by Landlord, and shall be attached in the manner approved by Landlord. All lighting fixtures hung in offices or spaces along the perimeter of the Premises must be of a quality, type, design, bulb color, size and general appearance approved by Landlord.

3. No sign, advertisement, notice, lettering, decoration or other thing shall be exhibited, inscribed, painted or affixed by Tenant on any part of the outside or inside of the Premises or of the Project, without the prior written consent of Landlord. In the event of the violation of the foregoing by Tenant, Landlord may remove same without any liability, and may charge the expense incurred by such removal to Tenant.

4. The sashes, sash doors, skylights, windows and doors that reflect or admit light or air into the halls, passageways or other public places in the Project shall not be covered or obstructed by Tenant, nor shall any bottles, parcels or other articles be placed on the window sills or in the public portions of the Project.

5. No showcases or other articles shall be put in front of or affixed to any part of the exterior of the Project, nor placed in public portions thereof without the prior written consent of Landlord.

6. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags or other substances shall be thrown therein. All damages resulting from any misuse of the fixtures shall be borne by Tenant to the extent that Tenant or Tenant's agents, servants, employees, contractors, visitors or licensees shall have caused the same.

7. Tenant shall not mark, paint, drill into or in any way deface any part of the Premises or the Project without in each instance obtaining the prior consent of Landlord to the extent required under the terms of the Lease of which these Rules and Regulations are a part (the "Lease"). No boring, cutting or stringing of wires shall be permitted, except with the prior written consent of Landlord to the extent required under the terms of the Lease.

8. No animal or bird of any kind shall be brought into or kept in or about the Premises or the Project by Tenant, except "service animals" under the ADA or any other applicable Law.

9. Tenant shall reasonably cooperate, at no cost or expense to Tenant, with Landlord's efforts to implement the Project's Sustainability Practices and the applicable Green Building Standards, including, but not limited to, complying with Landlord's then-current energy saving efforts and participating in any recycling programs and occupant satisfaction and transportation surveys.

10. Prior to leaving the Premises for the day, Tenant shall draw or lower window coverings and extinguish all lights.

11. Tenant shall regularly conduct cleaning and janitorial activities in the Premises, especially in bathrooms, kitchens and janitorial spaces, to remove and prevent mildew and shall comply with the Project's Sustainability Practices and Tenant is strongly encouraged to comply with the applicable Green Building Standards.

12. Tenant shall not make, or permit to be made, in the Premises, any unseemly or disturbing noises or unreasonably disturb or interfere with other occupants of the Building, or neighboring buildings or premises, or those having business with them. Tenant shall not throw anything out of the doors, windows or skylights or down the passageways.

13. Neither Tenant nor any of Tenant's agents, servants, employees, contractors, visitors or licensees shall at any time bring or keep upon the Premises any flammable, combustible or explosive fluid, chemical or substance, except in accordance with Laws.

14. No additional locks, bolts or mail slots of any kind shall be placed upon any of the doors or windows of the Premises by Tenant, nor shall any change be made in existing locks or the mechanism thereof, without in each instance first obtaining the prior written consent of Landlord to the extent required under the terms of the Lease. Tenant must, upon the termination of the tenancy, restore to Landlord all keys of stores, offices and toilet rooms, either furnished to, or otherwise procured by Tenant, and in the event of the loss of any keys so furnished, Tenant shall pay to Landlord the cost thereof.

15. All removals, or the carrying in or out of any safes, freight, furniture, construction material, bulky matter or heavy equipment of any description must take place during the hours which Landlord or its agent may determine from time to time. Landlord reserves the right to prescribe the weight and position of all safes, which must be placed upon two-inch thick plank strips to distribute the weight. The moving of safes, freight, furniture, fixtures, bulky matter or heavy equipment of any kind must be made upon previous notice to the building manager appointed by Landlord and made known in writing to Tenant and in a manner and at times prescribed by the Building Manager, and the persons employed by Tenant for such work are subject to Landlord's reasonable prior approval. Landlord reserves the right to inspect all safes, freight or other bulky articles to be brought into the Project and to exclude from the Project all safes, freight or other bulky articles which exceed the load bearing capacity of the floors of the Building or which violate any of these Rules and Regulations or the Lease of which these Rules and Regulations are a part.

16. Tenant shall not purchase janitorial or maintenance or other like service from any company or persons not reasonably approved by Landlord. Landlord shall approve a sufficient number of sources of such services to provide Tenant with a reasonable selection, but only in such instances and to such extent as Landlord in its judgment shall consider consistent with security and proper operation of the Project.

17. Landlord shall have the right to prohibit any advertising or business conducted by Tenant referring to the Project which, in Landlord's opinion, tends to impair the reputation of the Project or its desirability as a first class building for offices and/or commercial services and upon notice from Landlord, Tenant shall refrain from or discontinue such advertising.

18. Landlord reserves the right to exclude from the Project between the hours of 6:00 p.m. and 8:00 a.m. Monday through Friday, after I:00 p.m. on Saturdays and at all hours Sundays and legal holidays, all persons who do not present a pass to the Project issued by Landlord. Landlord may furnish passes to Tenant so that Tenant may validate and issue same. Tenant shall safeguard said passes and shall be responsible for all acts of persons in or about the Project who possess a pass issued to Tenant.

19. Tenant's vendors and contractors shall, while in the Premises or elsewhere in the Project, be subject to and under the control and direction of the Building Manager (but not as agent or servant of said Building Manager or of Landlord) and, prior to commencing any work, shall be required to maintain (and provide certificates of) such insurance coverage as reasonably approved by Landlord.

20. If the Premises is or becomes infested with vermin as a result of the use or any misuse or neglect of the Premises by Tenant, its agents, servants, employees, contractors, visitors or licensees, Tenant shall forthwith at Tenant's expense cause the same to be exterminated from time to time to the satisfaction of Landlord and shall employ such licensed exterminators as shall be approved in writing in advance by Landlord.

21. The requirements of Tenant will be attended to only upon application at the office of the Project. Project personnel shall not perform any work or do anything outside of their regular duties unless under special instructions from the office of Landlord.

22. Canvassing, soliciting and peddling in the Project are prohibited and Tenant shall cooperate to prevent the same.

23. No water cooler, air conditioning unit or system or other apparatus shall be installed or used by Tenant without the written consent of Landlord to the extent required by the terms of the Lease.

24. There shall not be used in any premises, or in the public halls, plaza areas, lobbies, or elsewhere in the Project, either by Tenant, Tenant's contractors or others, in the delivery or receipt of merchandise, any hand trucks or dollies, except those equipped with rubber tires and sideguards.

25. Tenant, Tenant's agents, servants, employees, contractors, licensees, or visitors shall not park any vehicles in any driveways, service entrances, or areas posted "No Parking" and shall comply with any other parking restrictions imposed by Landlord from time to time , so long as such restrictions are consistent with the terms of the Lease.

26. Tenant shall install and maintain, at Tenant's sole cost and expense, an adequate visibly marked (at all times properly operational) fire extinguisher next to any duplicating or photocopying machine or similar heat producing equipment, which may or may not contain combustible material, in the Premises.

27. Tenant shall not use the name of the Project for any purpose other than as the address of the business to be conducted by Tenant in the Premises, nor shall Tenant use any picture of the Project in its advertising, stationery or in any other manner without the prior written permission of Landlord. Landlord expressly reserves the right at any time to change said name without in any manner being liable to Tenant therefor.

28. Tenant shall not prepare any food nor do any cooking, operate or conduct any restaurant, luncheonette or cafeteria for the sale or service of food or beverages to its employees or to others, except that food and beverage preparation by Tenant's employees using microwave ovens or coffee makers shall be permitted provided no odors of cooking or other processes emanate from the Premises. Tenant shall not install or permit the installation or use of any vending machine or permit the delivery of any food or beverage to the Premises except by such persons and in such manner as are approved in advance in writing by Landlord.

29. The Premises shall not be used as an employment agency, a public stenographer or typist, a labor union office, a physician's or dentist's office, a dance or music studio, a school, a beauty salon, or barber shop, the business of photographic reproductions or offset printing, a restaurant or bar, an establishment for the sale of confectionery, soda, beverages, sandwiches, ice cream or baked goods, an establishment for preparing, dispensing or consumption of food or beverages of any kind in any manner whatsoever, or news or cigar stand, or a radio, television or recording studio, theatre or exhibition hall, or the sale of merchandise, goods or property of any kind at auction, or for lodging or sleeping.

30. Business machines and mechanical equipment shall be placed and maintained by Tenant at Tenant's expense in settings sufficient in Landlord's judgment to absorb and prevent vibration, noise and annoyance. Tenant shall not install any machine or equipment which causes noise, heat, cold or vibration to be transmitted to the structure of the building in which the Premises are located without Landlord's prior written consent, which consent may be conditioned on such terms as Landlord may require. Tenant shall not place a load upon any floor of the Premises exceeding the floor load per square foot that such floor was designed to carry and which is allowed by Law.

31. Tenant shall not store any vehicle within the parking area. Tenant's parking rights are limited to the use of parking spaces for short-term parking, of up to twenty-four (24) hours, of vehicles utilized in the normal and regular daily travel to and from the Project. Tenants who wish to park a vehicle for longer than a 24-hour period shall notify the Building Manager for the Project and consent to such long-term parking may be granted for periods up to two (2) weeks. Any motor vehicles parked without the prior written consent of the Building Manager for the Project for longer than a 24-hour period shall be deemed stored in violation of this rule and regulation and shall be towed away and stored at the owner's expense or disposed of as provided by Law.

32. Smoking is prohibited in the Premises, the Building and all enclosed Common Areas of the Project, including all lobbies, all hallways, all elevators and all lavatories. “Smoking”, as used herein, shall be deemed to include the use of e-cigarettes, smokeless cigarettes and other similar products. All rules and regulations set forth in this Exhibit C applicable to smoking also apply to the use of e-cigarettes, smokeless cigarettes and other similar products.

33. Tenant shall not store any items within 18 inches of a sprinkler head.

34. Building ladders, other than fixed ladders, are not to be used by Tenant, Tenant’s agents, servants, employees, contractors, licensees or visitors.

35. Electrical power strips (other than for standard office desktop equipment) and portable “space heaters” are not permitted.

36. Tenants are not permitted to open an electrical panel. Tenants are required to contact Landlord to reset a circuit breaker.

37. Tenant shall reimburse Landlord for the cost (plus an administrative charge at Landlord’s then prevailing rate) of Landlord providing any special services or work requested in writing by Tenant to the extent such services or work are not specifically set forth as a Landlord obligation in the Lease.

EXHIBIT D

CAMPUS

Exhibit 10.27

OFFICER EMPLOYMENT AGREEMENT

This Officer Employment Agreement ("Agreement") is made as June 30, 2017 ("Effective Date"), and is by and between Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710 (the "Company"), and Rachel E. Haurwitz, Ph.D. (the "Officer").

WHEREAS, the Company desires to continue to employ the Officer and the Officer desires to continue to be employed by the Company on the new terms and conditions contained herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Employment.

a. Term. The term of this Agreement shall commence on the Effective Date and continue until terminated in accordance with the provisions hereof (the "Term").

b. Position and Duties. During the Term, the Officer shall serve as the President and Chief Executive Officer of the Company, and shall have supervision and control over and responsibility for the day-to-day business and affairs of the Company as may from time to time be prescribed by the Company's Board of Directors of the Company, provided that such duties are consistent with the Officer's position or other positions that he or she may hold from time to time. The Officer shall devote substantially all of his or her full working time and efforts to the business of the Company. Notwithstanding the foregoing, the Officer may serve on other boards of directors, with the approval of the Board, or sit on the governing boards of, or hold leadership positions related to community, charitable, academic, and religious activities as long as such services and activities are disclosed to the Board and do not materially interfere with the Officer's performance of his or her duties to the Company as provided in this Agreement.

2. Compensation and Related Matters.

a. Base Salary. During the Term, the Officer's initial annual base salary shall be $325,000.00. The Officer's base salary shall be reviewed from time to time by the Company's Board of Directors ("Board") or the Compensation Committee of the Board. The base salary in effect at any given time is referred to herein as "Base Salary." The Base Salary shall be payable in a manner that is consistent with the Company's usual payroll practices.

b. Incentive Compensation. During the Term, the Officer shall be eligible to receive cash incentive compensation as determined by the Board or the Compensation Committee from time to time. The Officer's initial target annual incentive compensation shall be 35% of his or her Base Salary. Except as otherwise provided herein, to earn incentive compensation, the Officer must be employed by the Company on the day such incentive compensation is paid.

c. Company Benefits. The Officer shall be entitled to all benefits received by employees of the Company in accordance with the Company's policies and plans.

3. Termination. During the Term, the Officer's employment hereunder may be terminated without any breach of this Agreement under the following circumstances:

a. Termination by the Company for Cause. The Company may terminate the Officer's employment hereunder for Cause. For purposes of this Agreement, "Cause" shall mean: (i) conduct by the Officer constituting a material act of misconduct in connection with the performance of his or her duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary, and de minimis use of Company property for personal purposes; (ii) the commission by the Officer of any felony or a misdemeanor involving moral turpitude, deceit, dishonesty or fraud, or any conduct by the Officer that would reasonably be expected to result in material injury or reputational harm to the Company or any of its subsidiaries and affiliates if he or she were retained in his or her position; (iii) continued non-performance by the Officer of his or

her duties hereunder (other than by reason of the Officer's physical or mental illness, incapacity or disability) that has continued for more than 30 days following written notice of such non-performance from the Board; (iv) a material violation by the Officer of the Company's written policies; or (v) failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the Company to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

b. Termination by the Company Without Cause. The Company may terminate the Officer's employment hereunder at any time without Cause upon written notice of such termination ("Notice of Termination"). Any termination by the Company of the Officer's employment under this Agreement which does not constitute a termination for Cause under Section 3(a) and does not result from the death or disability of the Officer under Section 3(d) or (e), respectively, shall be deemed a termination without Cause.

c. Termination by the Officer. The Officer may terminate his or her employment hereunder at any time for any reason, including but not limited to Good Reason. For purposes of this Agreement, "Good Reason" shall mean that the Officer has complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in the Officer's responsibilities, authority or duties; (ii) a decrease of more than 10% of the Officer's Base Salary except for across-the-board salary reductions based on the Company's financial performance similarly affecting all officers of the Company; (iii) a change by the Company in the Company location at which the Officer performs his or her duties to a location that is more than 50 miles (driving distance) from the original location; or (iv) the material breach of this Agreement by the Company. "Good Reason Process" shall mean that (i) the Officer reasonably determines in good faith that a "Good Reason" condition has occurred; (ii) the Officer notifies the Company in writing of the first occurrence of the Good Reason condition within 30 days of the first occurrence of such condition; (iii) the Officer cooperates in good faith with the Company's efforts, for a period of 30 days following such notice (the "Cure Period"), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) the Officer terminates his or her employment within 30 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

d. Death. The Officer's employment hereunder shall terminate upon his or her death.

e. Disability. The Company may terminate the Officer's employment if he or she is disabled and unable to perform the essential functions of the Officer's then existing position or positions under this Agreement with or without reasonable accommodation for a period of 180 days (which need not be consecutive) in any 12-month period and the Company shall provide a Notice of Termination at that time. If any question shall arise as to whether during any period the Officer is disabled so as to be unable to perform the essential functions of the Officer's then existing position or positions with or without reasonable accommodation, the Officer may, and at the request of the Company shall, submit to the Company a certification in reasonable detail by a physician selected by the Company to whom the Officer or the Officer's guardian has no reasonable objection as to whether the Officer is so disabled or how long such disability is expected to continue, and such certification shall for the purposes of this Agreement be conclusive of the issue. The Officer shall cooperate with any reasonable request of the physician in connection with such certification. If such question shall arise and the Officer shall fail to submit such certification, the Company's determination of such issue shall be binding on the Officer. Nothing in this Section 3(b) shall be construed to waive the Officer's rights, if any, under existing federal and state law including, without limitation, the Family and Medical Leave Act of 1993, 29 U.S.C. §2601, *et seq.* and the Americans with Disabilities Act, 42 U.S.C. §12101, *et seq.*

f. Notice of Termination. Except for termination as specified in Section 3(d), any termination of the Officer's employment by the Company or any such termination by the Officer shall be communicated by written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a written notice which shall indicate the specific termination provision in this Agreement relied upon.

g. Date of Termination. "Date of Termination" shall mean: (i) if the Officer's employment is terminated by the Company for Cause under Section 3(a) or without Cause under Section 3(b) or on account of disability under Section 3(e), the date on which Notice of Termination is given; (ii) if the Officer's employment is terminated by the Officer under Section 3(c) without Good Reason, 30 days after the date on which a Notice of

Termination is given; (iii) if the Officer's employment is terminated by the Officer under Section 3(c) with Good Reason, the date on which a Notice of Termination is given after the end of the Cure Period; and (iv) if the Officer's employment is terminated by his or her death, the date of his or her death. Notwithstanding the foregoing, in the event that the Officer gives a Notice of Termination to the Company under Section 3(c), the Company may unilaterally and solely at its own discretion accelerate the Date of Termination and such acceleration shall not result in a termination by the Company for purposes of this Agreement; provided, however, that in no event shall such accelerated Date of Termination be earlier than the date on which the Notice of Termination is delivered to the Company.

4. Compensation Upon Termination.

a. Termination Generally. If the Officer's employment with the Company is terminated for any reason, the Company shall pay or provide to the Officer (or to his or her authorized representative or estate) (i) any Base Salary earned through the Date of Termination, unpaid expense reimbursements in accordance with Company policy, and unused vacation that accrued through the Date of Termination on or before the time required by law but in no event more than 30 days after the Officer's Date of Termination; and (ii) any vested benefits the Officer may have under any employee benefit plan of the Company through the Date of Termination, which vested benefits shall be paid and/or provided in accordance with the terms of such employee benefit plans (collectively, the "Accrued Benefit").

b. Termination by the Company Without Cause or by the Officer with Good Reason. During the Term, if the Officer's employment is terminated by the Company without Cause as provided in Section 3(b), or the Officer terminates his or her employment for Good Reason as provided in Section 3(c), then the Company shall provide the Officer with the Accrued Benefit and the compensation and benefits set forth in this Section 4(b), the latter subject to the Officer signing a separation agreement containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property, and non-disparagement, in a form and manner satisfactory to the Company (the "Separation Agreement and Release") and the Separation Agreement and Release becoming fully effective, all within the time frame set forth in the Separation Agreement and Release: (i) the Company shall pay the Officer an amount equal to 9 months of the Officer's Base Salary (the "Severance Amount"); (ii) if the Officer (and his or her dependents, if applicable) was participating in the Company's group health plans immediately prior to the Date of Termination and the Officer elects COBRA health continuation for himself or herself (and his or her dependents, if applicable), then the Company shall pay for 9 months or the Officer's COBRA health continuation period, whichever ends earlier, the COBRA health contribution that the Company would have made to provide health insurance to the Officer (and his or her dependents, if applicable) if the Officer had remained employed by the Company; provided, however, that the Company shall only be required to pay that percentage of dependent health insurance that the Company would be paying if the Officer had remained employed by the Company; (iii) 100% of the Officer's then-unvested stock options and restricted stock, if any, shall become immediately vested, and the Officer shall have 12 months from the Date of Termination in which to exercise his or her stock options (regardless of any language to the contrary in any stock plan then in effect); and (iv) the amounts payable under Sections 4(b)(i) and (ii) shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 9 months commencing within 30 days after the date the Separation Agreement and Release becomes fully effective; provided, however, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

c. Change of Control. During the Term, if within 12 months after a Change in Control as defined herein, the Officer's employment is terminated by the Company without Cause as provided in Section 3(b) or the Officer terminates his or her employment for Good Reason as provided in Section 3(c), then, subject to the signing of the Separation Agreement and Release by the Officer and the Separation Agreement and Release becoming fully effective all within the time frame set forth in the Separation Agreement and Release, the Officer shall receive the benefits set forth in Section 4(b)(i), (ii), and (iii); provided, however, that notwithstanding the language in Section 4(b)(iv), the Severance Amount set forth in Section 4(b)(i) shall be payable as a lump sum within 5 business days after the Separation Agreement and Release becomes fully effective (for clarity, the COBRA payments set forth in Section 4(b)(ii) shall be paid in accordance with Section 4(b)(iv)). For purposes of this Section 4(c), "Change in Control" shall mean any of the following: (i) any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act") (other than the Company, any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any

of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the Company); or (ii) the date a majority of the members of the Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or (iii) the consummation of (A) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than 50% of the voting shares of the Company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (B) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company. Notwithstanding the foregoing, a "Change in Control" shall not be deemed to have occurred for purposes of the foregoing clause solely as the result of an acquisition of securities by the Company that, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of Voting Securities beneficially owned by any person to 50% or more of the combined voting power of all of the then outstanding Voting Securities; provided, however, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly from the Company) and immediately thereafter beneficially owns 50% or more of the combined voting power of all of the then outstanding Voting Securities, then a "Change in Control" shall be deemed to have occurred.

5. Additional Limitations and Section 409A.

a. Additional Limitations. Notwithstanding anything to the contrary in this Agreement, in the event that the amount of any compensation, payment or distribution by the Company **to** or for the benefit of the Officer, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), and the applicable regulations thereunder (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Code, then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which the Officer becomes subject to the excise tax imposed by Section 4999 of the Code; provided that such reduction shall only occur if it would result in the Officer receiving a higher After Tax Amount (as defined below) than the Officer would receive if the Aggregate Payments were not subject to such reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G of the Code: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.2800-1, Q&A-24(b) or (c). For purposes of this Section 5(a), the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on the Officer as a result of the Officer's receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, the Officer shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes. The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to Section 5(b)(i) shall be made by a nationally recognized accounting firm selected by the Company (the "Accounting Firm"), which shall provide detailed supporting calculations both to the Company and the Officer within 15 business days of the Date of Termination, if applicable, or at such earlier time as is reasonably requested by the Company or the Officer. Any determination by the Accounting Firm shall be binding upon the Company and the Officer.

b. Section 409A. Notwithstanding anything to the contrary in this Agreement, if at the time of the Officer's separation from service within the meaning of Section 409A of the Code, the Company determines that the

Officer is a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that the Officer becomes entitled to under this Agreement on account of the Officer's separation from service would be considered deferred compensation otherwise subject to the 20% additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) 6 months and one day after the Officer's separation from service or (B) the Officer's death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by the Officer during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit. To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Officer's termination of employment, then such payments or benefits shall be payable only upon the Officer's "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h). The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a mariner so that all payments hereunder comply with Section 409A of the Code. The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party. The Company makes no representation or warranty and shall have no liability to the Officer or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section 409A.

6. Litigation and Regulatory Cooperation. During and after the Term, the Officer shall cooperate fully with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company that relate to events or occurrences that transpired while the Officer was employed by the Company. The Officer's full cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after the Term, the Officer also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while the Officer was employed by the Company. The Company shall reimburse the Officer for any reasonable out-of-pocket expenses incurred in connection with the Officer's performance of obligations pursuant to this Section 6 and, after his or her employment with the Company terminates, the Officer may be entitled for reasonable compensation for his or her time. For the avoidance of doubt, nothing in this Agreement shall be interpreted or applied to prohibit the Officer from making any good faith report to any governmental agency or other governmental entity concerning any act or omission that the Officer reasonably believes constitutes a possible violation of federal or state law or making other disclosures that are protected under the anti-retaliation or whistleblower provisions of applicable federal or state law or regulation.

7. Relief. The Officer agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Officer of this Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, the Officer agrees that if the Officer breaches, or proposes to breach, this Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company. In addition, in the event the Officer breaches the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement, dated [DATE], by and between the Company and the Officer, during a period when he or she is receiving severance payments pursuant to Section 4(b) or (c), the Company shall have the right to suspend or terminate such severance payments. Such suspension or termination shall not limit the Company's other options with respect to relief for such breach and shall not relieve the Officer of his or her duties under this Agreement.

8. Governing Law and Jurisdiction. This Agreement shall be governed by the laws of the State of California, and the parties hereby consent to the jurisdiction of the state and federal courts in the State of California.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter, with the sole exception of the Employee Proprietary Information and Inventions Agreement, dated June 13, 2012, and the Indemnification Agreement, dated September 11, 2014, both by and between the Company and the Officer. If there are any conflicts between the terms and conditions of the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement and this Agreement, the terms and conditions of this Agreement shall govern.

10. Successor to the Officer. This Agreement shall inure to the benefit of and be enforceable by the Officer's personal representatives, executors, administrators, heirs, distributees, devisees and legatees. In the event of the Officer's death after his or her termination of employment but prior to the completion by the Company of all payments due him or her under this Agreement, the Company shall continue such payments to the Officer's beneficiary designated in writing to the Company prior to his or her death (or to his or her estate, if the Officer fails to make such designation).

11. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

12. Survival. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of the Officer's employment to the extent necessary to effectuate the terms contained herein.

13. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

14. Notices. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by a nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested, to the Officer at the last address the Officer has filed in writing with the Company or, in the case of the Company, at the address set forth above to the President and Chief Executive Officer with a copy to legalnotices@caribou bio.com; provided that if the Officer providing notice is the President and Chief Executive Officer, she is not required to provide notice to herself but instead shall provide written notice to the Chief Legal Officer.

15. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Officer and by a duly authorized representative of the Company.

16. Successor to Company. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and agree to perform this Agreement to the same extent that the Company would be required to perform it if no succession had taken place. Failure of the Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a material breach of this Agreement.

17. Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be taken to be an original; but such counterparts shall together constitute one and the same document.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

Caribou Biosciences, Inc.

By: /s/ Barbara G. McClung

Name: Barbara G. McClung, J.D.

Title: Chief Legal Officer

Rachel E. Haurwitz, Ph.D.

By: /s/ Rachel E. Hauriwitz

Exhibit 10.28

AMENDMENT NO. 1 to OFFICER EMPLOYMENT AGREEMENT

This Amendment No. 1 to Officer Employment Agreement ("Amendment") is made April 10, 2019 ("Amendment Effective Date") and is by and between Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710 (the "Company"), and Rachel E. Haurwitz, Ph.D. (the "Officer").

WHEREAS, the Company and the Officer have entered into an Officer Employment Agreement, having an Effective Date of June 30, 2017 (the "Agreement"); and

WHEREAS, the Company and the Officer desire to update the Agreement as set forth herein and in accordance with Section 15 of the Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Officer agree as follows:

1. The Agreement is amended to delete Section 7 in its entirety and replace it with the following Section 7:

   7. **Relief.** The Officer agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Officer of this Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, the Officer agrees that if the Officer breaches, or proposes to breach, this Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company. In addition, in the event the Officer breaches the Confidential Information and Invention Assignment Agreement, effective as of April 10, 2019, by and between the Company and the Officer ("CIIA"), during a period when he or she is receiving severance payments pursuant to Section 4(b) or (c), the Company shall have the right to suspend or terminate such severance payments. Such suspension or termination shall not limit the Company's other options with respect to relief for such breach and shall not relieve the Officer of his or her duties under this Agreement.

2. The Agreement is amended to delete Section 9 in its entirety and replace it with the following Section 9:

   9. **Integration.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter, with the sole exception of the CIIA and the Indemnification Agreement, dated September 11, 2014, both by and between the Company and the Officer. If there are any conflicts between the terms and conditions of the CIIA and this Agreement, the terms and conditions of this Agreement shall govern.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 1 to Officer Employment Agreement as of the Amendment Effective Date.

Caribou Biosciences, Inc.

By: /s/ Barbara G. McClung, J.D.
Barbara G. McClung J.D.
Chief Legal Officer and Corporate Secretary

Rachel E. Haurwitz, Ph.D.

By: /s/ Rachel E. Haurwitz, Ph.D.

Exhibit 10.29

[Caribou Biosciences, Inc. Letterhead]

Confidential

February 19, 2021

Rachel Haurwitz
2512 Sherborne Drive
Belmont, CA 94002

Dear Rachel:

Effective January 1, 2021, your base salary will be $495,000 with a target bonus of 45%. You will receive a retroactive payment for January 1 to February 15, 2021 in your next paycheck (February 26, 2021).

I am pleased to announce that the Caribou Board of Directors has approved a bonus based on the Company's achievements in 2020. You will receive a one-time payment of $202,500.00, less applicable withholding taxes, on February 26, 2021.

In spite of the many challenges that 2020 thrust upon the Company, our communities, and our families, the herd impressively managed to accomplish many of the Company's 2020 corporate goals:

- filing the IND for CB-010 and initiating the ANTLER Phase 1 trial,
- nominating a third pipeline program,
- establishing a robust and reproducible process for iNK differentiation,
- ~50% insertion in primary T cells with a long non-viral DNA template using Cas12a chRDNAs, and
- implementing Type I editing in iPSC lines.

Other goals that we did not complete by the end of 2020 are well underway or already completed including manufacturing GLP material for CB-011, closing a strategic partnership, and closing the Series C. The other members of the Board and I are grateful to you for your hard work and your support of these multiple key efforts. Caribou has the exciting and challenging opportunity to transform our cutting-edge technologies into therapies with best-in-class potential. Only through the continued collective efforts of the herd will we achieve our ambitious 2021 goals.

Please let Cindy know if you want to contribute to your 401(k) account from this bonus payment. Nothing in this letter shall be construed as a guarantee of employment, your employment remains at-will, and the Company reserves the right to change your title, reporting structure, and/or compensation at any time. As a reminder, this letter contains Caribou Confidential Information.

Best regards,

/s/ Barbara G. McClung

Barbara G. McClung
Chief Legal Officer and Corporate Secretary

Exhibit 10.31
CONFIDENTIAL

OFFICER EMPLOYMENT AGREEMENT

This Officer Employment Agreement ("Agreement") is made as June 30, 2017 ("Effective Date"), and is by and between Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710 (the "Company"), and Steven B. Kanner, Ph.D. (the "Officer").

WHEREAS, the Company desires to continue to employ the Officer and the Officer desires to continue to be employed by the Company on the new terms and conditions contained herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Employment.

a. Term. The term of this Agreement shall commence on the Effective Date and continue until terminated in accordance with the provisions hereof (the "Term").

b. Position and Duties. During the Term, the Officer shall serve as the Chief Scientific Officer of the Company, and shall have supervision and control over and responsibility for the day-to-day business and affairs of the Company as may from time to time be prescribed by the Company's President and Chief Executive Officer of the Company, provided that such duties are consistent with the Officer's position or other positions that he or she may hold from time to time. The Officer shall devote substantially all of his or her full working time and efforts to the business of the Company. Notwithstanding the foregoing, the Officer may serve on other boards of directors, with the approval of the Board, or sit on the governing boards of, or hold leadership positions related to community, charitable, academic, and religious activities as long as such services and activities are disclosed to the Board and do not materially interfere with the Officer's performance of his or her duties to the Company as provided in this Agreement.

2. Compensation and Related Matters.

a. Base Salary. During the Term, the Officer's initial annual base salary shall be $290,000.00. The Officer's base salary shall be reviewed from time to time by the Company's Board of Directors ("Board") or the Compensation Committee of the Board. The base salary in effect at any given time is referred to herein as "Base Salary." The Base Salary shall be payable in a manner that is consistent with the Company's usual payroll practices.

b. Incentive Compensation. During the Term, the Officer shall be eligible to receive cash incentive compensation as determined by the Board or the Compensation Committee from time to time. The Officer's initial target annual incentive compensation shall be 30% of his or her Base Salary. Except as otherwise provided herein, to earn incentive compensation, the Officer must be employed by the Company on the day such incentive compensation is paid.

c. Company Benefits. The Officer shall be entitled to all benefits received by employees of the Company in accordance with the Company's policies and plans.

3. Termination. During the Term, the Officer's employment hereunder may be terminated without any breach of this Agreement under the following circumstances:

a. Termination by the Company for Cause. The Company may terminate the Officer's employment hereunder for Cause. For purposes of this Agreement, "Cause" shall mean: (i) conduct by the Officer constituting a material act of misconduct in connection with the performance of his or her duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary, and de minimis use of Company property for personal purposes; (ii) the commission by the Officer of any felony or a misdemeanor involving moral turpitude, deceit, dishonesty or fraud, or any conduct by the Officer that would reasonably be expected to result in material injury or reputational harm to the Company or any of its subsidiaries and affiliates if he or she were retained in his or her position; (iii) continued non-performance by the Officer of his or

her duties hereunder (other than by reason of the Officer's physical or mental illness, incapacity or disability) that has continued for more than 30 days following written notice of such non-performance from the Board; (iv) a material violation by the Officer of the Company's written policies; or (v) failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the Company to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

b. Termination by the Company Without Cause. The Company may terminate the Officer's employment hereunder at any time without Cause upon written notice of such termination ("Notice of Termination"). Any termination by the Company of the Officer's employment under this Agreement which does not constitute a termination for Cause under Section 3(a) and does not result from the death or disability of the Officer under Section 3(d) or (e), respectively, shall be deemed a termination without Cause.

c. Termination by the Officer. The Officer may terminate his or her employment hereunder at any time for any reason, including but not limited to Good Reason. For purposes of this Agreement, "Good Reason" shall mean that the Officer has complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in the Officer's responsibilities, authority or duties; (ii) a decrease of more than 10% of the Officer's Base Salary except for across-the-board salary reductions based on the Company's financial performance similarly affecting all officers of the Company; (iii) a change by the Company in the Company location at which the Officer performs his or her duties to a location that is more than 50 miles (driving distance) from the original location; or (iv) the material breach of this Agreement by the Company. "Good Reason Process" shall mean that (i) the Officer reasonably determines in good faith that a "Good Reason" condition has occurred; (ii) the Officer notifies the Company in writing of the first occurrence of the Good Reason condition within 30 days of the first occurrence of such condition; (iii) the Officer cooperates in good faith with the Company's efforts, for a period of 30 days following such notice (the "Cure Period"), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) the Officer terminates his or her employment within 30 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

d. Death. The Officer's employment hereunder shall terminate upon his or her death.

e. Disability. The Company may terminate the Officer's employment if he or she is disabled and unable to perform the essential functions of the Officer's then existing position or positions under this Agreement with or without reasonable accommodation for a period of 180 days (which need not be consecutive) in any 12-month period and the Company shall provide a Notice of Termination at that time. If any question shall arise as to whether during any period the Officer is disabled so as to be unable to perform the essential functions of the Officer's then existing position or positions with or without reasonable accommodation, the Officer may, and at the request of the Company shall, submit to the Company a certification in reasonable detail by a physician selected by the Company to whom the Officer or the Officer's guardian has no reasonable objection as to whether the Officer is so disabled or how long such disability is expected to continue, and such certification shall for the purposes of this Agreement be conclusive of the issue. The Officer shall cooperate with any reasonable request of the physician in connection with such certification. If such question shall arise and the Officer shall fail to submit such certification, the Company's determination of such issue shall be binding on the Officer. Nothing in this Section 3(b) shall be construed to waive the Officer's rights, if any, under existing federal and state law including, without limitation, the Family and Medical Leave Act of 1993, 29 U.S.C. §2601, *et seq.* and the Americans with Disabilities Act, 42 U.S.C. §12101, *et seq.*

f. Notice of Termination. Except for termination as specified in Section 3(d), any termination of the Officer's employment by the Company or any such termination by the Officer shall be communicated by written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a written notice which shall indicate the specific termination provision in this Agreement relied upon.

g. Date of Termination. "Date of Termination" shall mean: (i) if the Officer's employment is terminated by the Company for Cause under Section 3(a) or without Cause under Section 3(b) or on account of disability under Section 3(e), the date on which Notice of Termination is given; (ii) if the Officer's employment is terminated by the Officer under Section 3(c) without Good Reason, 30 days after the date on which a Notice of

Termination is given; (iii) if the Officer's employment is terminated by the Officer under Section 3(c) with Good Reason, the date on which a Notice of Termination is given after the end of the Cure Period; and (iv) if the Officer's employment is terminated by his or her death, the date of his or her death. Notwithstanding the foregoing, in the event that the Officer gives a Notice of Termination to the Company under Section 3(c), the Company may unilaterally and solely at its own discretion accelerate the Date of Termination and such acceleration shall not result in a termination by the Company for purposes of this Agreement; provided, however, that in no event shall such accelerated Date of Termination be earlier than the date on which the Notice of Termination is delivered to the Company.

4. Compensation Upon Termination.

a. Termination Generally. If the Officer's employment with the Company is terminated for any reason, the Company shall pay or provide to the Officer (or to his or her authorized representative or estate) (i) any Base Salary earned through the Date of Termination, unpaid expense reimbursements in accordance with Company policy, and unused vacation that accrued through the Date of Termination on or before the time required by law but in no event more than 30 days after the Officer's Date of Termination; and (ii) any vested benefits the Officer may have under any employee benefit plan of the Company through the Date of Termination, which vested benefits shall be paid and/or provided in accordance with the terms of such employee benefit plans (collectively, the "Accrued Benefit").

b. Termination by the Company Without Cause or by the Officer with Good Reason. During the Term, if the Officer's employment is terminated by the Company without Cause as provided in Section 3(b), or the Officer terminates his or her employment for Good Reason as provided in Section 3(c), then the Company shall provide the Officer with the Accrued Benefit and the compensation and benefits set forth in this Section 4(b), the latter subject to the Officer signing a separation agreement containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property, and non-disparagement, in a form and manner satisfactory to the Company (the "Separation Agreement and Release") and the Separation Agreement and Release becoming fully effective, all within the time frame set forth in the Separation Agreement and Release: (i) the Company shall pay the Officer an amount equal to 9 months of the Officer's Base Salary (the "Severance Amount"); (ii) if the Officer (and his or her dependents, if applicable) was participating in the Company's group health plans immediately prior to the Date of Termination and the Officer elects COBRA health continuation for himself or herself (and his or her dependents, if applicable), then the Company shall pay for 9 months or the Officer's COBRA health continuation period, whichever ends earlier, the COBRA health contribution that the Company would have made to provide health insurance to the Officer (and his or her dependents, if applicable) if the Officer had remained employed by the Company; provided, however, that the Company shall only be required to pay that percentage of dependent health insurance that the Company would be paying if the Officer had remained employed by the Company; (iii) 100% of the Officer's then-unvested stock options and restricted stock, if any, shall become immediately vested, and the Officer shall have 12 months from the Date of Termination in which to exercise his or her stock options (regardless of any language to the contrary in any stock plan then in effect); and (iv) the amounts payable under Sections 4(b)(i) and (ii) shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 9 months commencing within 30 days after the date the Separation Agreement and Release becomes fully effective; provided, however, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

c. Change of Control. During the Term, if within 12 months after a Change in Control as defined herein, the Officer's employment is terminated by the Company without Cause as provided in Section 3(b) or the Officer terminates his or her employment for Good Reason as provided in Section 3(c), then, subject to the signing of the Separation Agreement and Release by the Officer and the Separation Agreement and Release becoming fully effective all within the time frame set forth in the Separation Agreement and Release, the Officer shall receive the benefits set forth in Section 4(b)(i), (ii), and (iii); provided, however, that notwithstanding the language in Section 4(b)(iv), the Severance Amount set forth in Section 4(b)(i) shall be payable as a lump sum within 5 business days after the Separation Agreement and Release becomes fully effective (for clarity, the COBRA payments set forth in Section 4(b)(ii) shall be paid in accordance with Section 4(b)(iv)). For purposes of this Section 4(c), "Change in Control" shall mean any of the following: (i) any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act") (other than the Company, any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any

of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the Company); or (ii) the date a majority of the members of the Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or (iii) the consummation of (A) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than 50% of the voting shares of the Company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (B) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company. Notwithstanding the foregoing, a "Change in Control" shall not be deemed to have occurred for purposes of the foregoing clause solely as the result of an acquisition of securities by the Company that, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of Voting Securities beneficially owned by any person to 50% or more of the combined voting power of all of the then outstanding Voting Securities; provided, however, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly from the Company) and immediately thereafter beneficially owns 50% or more of the combined voting power of all of the then outstanding Voting Securities, then a "Change in Control" shall be deemed to have occurred.

5. Additional Limitations and Section 409A.

a. Additional Limitations. Notwithstanding anything to the contrary in this Agreement, in the event that the amount of any compensation, payment or distribution by the Company to or for the benefit of the Officer, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), and the applicable regulations thereunder (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Code, then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which the Officer becomes subject to the excise tax imposed by Section 4999 of the Code; provided that such reduction shall only occur if it would result in the Officer receiving a higher After Tax Amount (as defined below) than the Officer would receive if the Aggregate Payments were not subject to such reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G of the Code: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c). For purposes of this Section 5(a), the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on the Officer as a result of the Officer's receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, the Officer shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes. The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to Section 5(b)(i) shall be made by a nationally recognized accounting firm selected by the Company (the "Accounting Firm"), which shall provide detailed supporting calculations both to the Company and the Officer within 15 business days of the Date of Termination, if applicable, or at such earlier time as is reasonably requested by the Company or the Officer. Any determination by the Accounting Firm shall be binding upon the Company and the Officer.

b. Section 409A. Notwithstanding anything to the contrary in this Agreement, if at the time of the Officer's separation from service within the meaning of Section 409A of the Code, the Company determines that the

Officer is a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that the Officer becomes entitled to under this Agreement on account of the Officer's separation from service would be considered deferred compensation otherwise subject to the 20% additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) 6 months and one day after the Officer's separation from service or (B) the Officer's death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by the Officer during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit. To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Officer's termination of employment, then such payments or benefits shall be payable only upon the Officer's "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h). The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party. The Company makes no representation or warranty and shall have no liability to the Officer or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section 409A.

6. Litigation and Regulatory Cooperation. During and after the Term, the Officer shall cooperate fully with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company that relate to events or occurrences that transpired while the Officer was employed by the Company. The Officer's full cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after the Term, the Officer also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while the Officer was employed by the Company. The Company shall reimburse the Officer for any reasonable out-of-pocket expenses incurred in connection with the Officer's performance of obligations pursuant to this Section 6 and, after his or her employment with the Company terminates, the Officer may be entitled for reasonable compensation for his or her time. For the avoidance of doubt, nothing in this Agreement shall be interpreted or applied to prohibit the Officer from making any good faith report to any governmental agency or other governmental entity concerning any act or omission that the Officer reasonably believes constitutes a possible violation of federal or state law or making other disclosures that are protected under the anti-retaliation or whistleblower provisions of applicable federal or state law or regulation.

7. Relief. The Officer agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Officer of this Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, the Officer agrees that if the Officer breaches, or proposes to breach, this Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company. In addition, in the event the Officer breaches the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement, dated [DATE], by and between the Company and the Officer, during a period when he or she is receiving severance payments pursuant to Section 4(b) or (c), the Company shall have the right to suspend or terminate such severance payments. Such suspension or termination shall not limit the Company's other options with respect to relief for such breach and shall not relieve the Officer of his or her duties under this Agreement.

8. Governing Law and Jurisdiction. This Agreement shall be governed by the laws of the State of California, and the parties hereby consent to the jurisdiction of the state and federal courts in the State of California.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter, with the sole exception of the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement, dated June 30, 2017, and the Indemnification. Agreement, dated June 30, 2017, both by and between the Company and the Officer. If there are any conflicts between the terms and conditions of the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement and this Agreement, the terms and conditions of this Agreement shall govern.

10. Successor to the Officer. This Agreement shall inure to the benefit of and be enforceable by the Officer's personal representatives, executors, administrators, heirs, distributees, devisees and legatees. In the event of the Officer's death after his or her termination of employment but prior to the completion by the Company of all payments due him or her under this Agreement, the Company shall continue such payments to the Officer's beneficiary designated in writing to the Company prior to his or her death (or to his or her estate, if the Officer fails to make such designation).

11. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

12. Survival. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of the Officer's employment to the extent necessary to effectuate the terms contained herein.

13. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

14. Notices. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by a nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested, to the Officer at the last address the Officer has filed in writing with the Company or, in the case of the Company, at the address set forth above to the President and Chief Executive Officer with a copy to legalnotices@cariboubio.com; provided that if the Officer providing notice is the President and Chief Executive Officer, she is not required to provide notice to herself but instead shall provide written notice to the Chief Legal Officer.

15. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Officer and by a duly authorized representative of the Company.

16. Successor to Company. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and agree to perform this Agreement to the same extent that the Company would be required to perform it if no succession had taken place. Failure of the Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a material breach of this Agreement.

17. Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be taken to be an original; but such counterparts shall together constitute one and the same document.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz

Name: Rachel E. Haurwitz, Ph.D.

Title: President and CEO

Steven B. Kanner, Ph.D.

By: /s/ Steven B. Kanner

Exhibit 10.32

CONFIDENTIAL

AMENDMENT NO. 1 to OFFICER EMPLOYMENT AGREEMENT

This Amendment No. 1 to Officer Employment Agreement ("Amendment") is made April 10, 2019 ("Amendment Effective Date") and is by and between Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710 (the "Company"), and Steven B. Kanner, Ph.D. (the "Officer").

WHEREAS, the Company and the Officer have entered into an Officer Employment Agreement, having an Effective Date of June 30, 2017 (the "Agreement"); and

WHEREAS, the Company and the Officer desire to update the Agreement as set forth herein and in accordance with Section 15 of the Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Officer agree as follows:

1. The Agreement is amended to delete Section 7 in its entirety and replace it with the following Section 7:

   7. **Relief.** The Officer agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Officer of this Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, the Officer agrees that if the Officer breaches, or proposes to breach, this Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company. In addition, in the event the Officer breaches the Confidential Information and Invention Assignment Agreement, effective as of April 10, 2019, by and between the Company and the Officer ("CIIA"), during a period when he or she is receiving severance payments pursuant to Section 4(b) or (c), the Company shall have the right to suspend or terminate such severance payments. Such suspension or termination shall not limit the Company's other options with respect to relief for such breach and shall not relieve the Officer of his or her duties under this Agreement.

2. The Agreement is amended to delete Section 9 in its entirety and replace it with the following Section 9:

   9. **Integration.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter, with the sole exception of the CIIA and the Indemnification Agreement, dated June 30, 2017, both by and between the Company and the Officer. If there are any conflicts between the terms and conditions of the CIIA and this Agreement, the terms and conditions of this Agreement shall govern.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 1 to Officer Employment Agreement as of the Amendment Effective Date.

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President & CEO

Steven B. Kanner, Ph.D

By: /s/ Steven B. Kanner

Exhibit 10.33

[Caribou Biosciences, Inc. Letterhead]

Confidential

June 14, 2019

Steve Kanner, Ph.D.
22 Yankee Hill
Oakland, CA 94618

Dear Steve:

In light of your contributions to the Company over the past year, the Board of Directors has approved an increase in your base salary to $355,000 effective July 1, 2019. Your new target bonus will be 35% effective for the 2019 bonus payment.

Thank you for your strategic leadership and continued service to Caribou. I'm excited to continue making significant progress with you.

Regards,

/s/ Rachel E. Haurwitz

Rachel E. Haurwitz, Ph. D.
President and CEO

Exhibit 10.35

CONFIDENTIAL

OFFICER EMPLOYMENT AGREEMENT

This Officer Employment Agreement ("Agreement") is made as June 30, 2017 ("Effective Date"), and is by and between Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710 (the "Company"), and Barbara G. McClung, J.D. (the "Officer").

WHEREAS, the Company desires to continue to employ the Officer and the Officer desires to continue to be employed by the Company on the new terms and conditions contained herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Employment.

a. Term. The term of this Agreement shall commence on the Effective Date and continue until terminated in accordance with the provisions hereof (the "Term").

b. Position and Duties. During the Term, the Officer shall serve as the Chief Legal Officer and Corporate Secretary of the Company, and shall have supervision and control over and responsibility for the day-to-day business and affairs of the Company as may from time to time be prescribed by the Company's President and Chief Executive Officer of the Company, provided that such duties are consistent with the Officer's position or other positions that he or she may hold from time to time. The Officer shall devote substantially all of his or her full working time and efforts to the business of the Company. Notwithstanding the foregoing, the Officer may serve on other boards of directors, with the approval of the Board, or sit on the governing boards of, or hold leadership positions related to community, charitable, academic, and religious activities as long as such services and activities are disclosed to the Board and do not materially interfere with the Officer's performance of his or her duties to the Company as provided in this Agreement.

2. Compensation and Related Matters

a. Base Salary. During the Term, the Officer's initial annual base salary shall be $260,000.00. The Officer's base salary shall be reviewed from time to time by the Company's Board of Directors ("Board") or the Compensation Committee of the Board. The base salary in effect at any given time is referred to herein as "Base Salary." The Base Salary shall be payable in a manner that is consistent with the Company's usual payroll practices.

b. Incentive Compensation. During the Term, the Officer shall be eligible to receive cash incentive compensation as determined by the Board or the Compensation Committee from time to time. The Officer's initial target annual incentive compensation shall be 25% of his or her Base Salary. Except as otherwise provided herein, to earn incentive compensation, the Officer must be employed by the Company on the day such incentive compensation is paid.

c. Company Benefits. The Officer shall be entitled to all benefits received by employees of the Company in accordance with the Company's policies and plans.

3. Termination. During the Term, the Officer's employment hereunder may be terminated without any breach of this Agreement under the following circumstances:

a. Termination by the Company for Cause. The Company may terminate the Officer's employment hereunder for Cause. For purposes of this Agreement, "Cause" shall mean: (i) conduct by the Officer constituting a material act of misconduct in connection with the performance of his or her duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary, and de minimis use of Company property for personal purposes; (ii) the commission by the Officer of any felony or a misdemeanor involving moral turpitude, deceit, dishonesty or fraud, or any conduct by the Officer that would reasonably be expected to result in material injury or reputational harm to the Company or any of its subsidiaries

and affiliates if he or she were retained in his or her position; (iii) continued non-performance by the Officer of his or her duties hereunder (other than by reason of the Officer's physical or mental illness, incapacity or disability) that has continued for more than 30 days following written notice of such non-performance from the Board; (iv) a material violation by the Officer of the Company's written policies; or (v) failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the Company to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

b. Termination by the Company Without Cause. The Company may terminate the Officer's employment hereunder at any time without Cause upon written notice of such termination ("Notice of Termination"). Any termination by the Company of the Officer's employment under this Agreement which does not constitute a termination for Cause under Section 3(a) and does not result from the death or disability of the Officer under Section 3(d) or (e), respectively, shall be deemed a termination without Cause.

c. Termination by the Officer. The Officer may terminate his or her employment hereunder at any time for any reason, including but not limited to Good Reason. For purposes of this Agreement, "Good Reason" shall mean that the Officer has complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in the Officer's responsibilities, authority or duties; (ii) a decrease of more than 10% of the Officer's Base Salary except for across-the-board salary reductions based on the Company's financial performance similarly affecting all officers of the Company; (iii) a change by the Company in the Company location at which the Officer performs his or her duties to a location that is more than 50 miles (driving distance) from the original location; or (iv) the material breach of this Agreement by the Company. "Good Reason Process" shall mean that (i) the Officer reasonably determines in good faith that a "Good Reason" condition has occurred; (ii) the Officer notifies the Company in writing of the first occurrence of the Good Reason condition within 30 days of the first occurrence of such condition; (iii) the Officer cooperates in good faith with the Company's efforts, for a period of 30 days following such notice (the "Cure Period"), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) the Officer terminates his or her employment within 30 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

d. Death. The Officer's employment hereunder shall terminate upon his or her death.

e. Disability. The Company may terminate the Officer's employment if he or she is disabled and unable to perform the essential functions of the Officer's then existing position or positions under this Agreement with or without reasonable accommodation for a period of 180 days (which need not be consecutive) in any 12-month period and the Company shall provide a Notice of Termination at that time. If any question shall arise as to whether during any period the Officer is disabled so as to be unable to perform the essential functions of the Officer's then existing position or positions with or without reasonable accommodation, the Officer may, and at the request of the Company shall, submit to the Company a certification in reasonable detail by a physician selected by the Company to whom the Officer or the Officer's guardian has no reasonable objection as to whether the Officer is so disabled or how long such disability is expected to continue, and such certification shall for the purposes of this Agreement be conclusive of the issue. The Officer shall cooperate with any reasonable request of the physician in connection with such certification. If such question shall arise and the Officer shall fail to submit such certification, the Company's determination of such issue shall be binding on the Officer. Nothing in this Section 3(b) shall be construed to waive the Officer's rights, if any, under existing federal and state law including, without limitation, the Family and Medical Leave Act of 1993, 29 U.S.C. §2601, *et seq.* and the Americans with Disabilities Act, 42 U.S.C. §12101, *et seq.*

f. Notice of Termination. Except for termination as specified in Section 3(d), any termination of the Officer's employment by the Company or any such termination by the Officer shall be communicated by written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a written notice which shall indicate the specific termination provision in this Agreement relied upon.

g. Date of Termination. "Date of Termination" shall mean: (i) if the Officer's employment is terminated by the Company for Cause under Section 3(a) or without Cause under Section 3(b) or on account of disability under Section 3(e), the date on which Notice of Termination is given; (ii) if the Officer's employment is

terminated by the Officer under Section 3(c) without Good Reason, 30 days after the date on which a Notice of Termination is given; (iii) if the Officer's employment is terminated by the Officer under Section 3(c) with Good Reason, the date on which a Notice of Termination is given after the end of the Cure Period; and (iv) if the Officer's employment is terminated by his or her death, the date of his or her death. Notwithstanding the foregoing, in the event that the Officer gives a Notice of Termination to the Company under Section 3(c), the Company may unilaterally and solely at its own discretion accelerate the Date of Termination and such acceleration shall not result in a termination by the Company for purposes of this Agreement; provided, however, that in no event shall such accelerated Date of Termination be earlier than the date on which the Notice of Termination is delivered to the Company.

4. Compensation Upon Termination.

a. Termination Generally. If the Officer's employment with the Company is terminated for any reason, the Company shall pay or provide to the Officer (or to his or her authorized representative or estate) (i) any Base Salary earned through the Date of Termination, unpaid expense reimbursements in accordance with Company policy, and unused vacation that accrued through the Date of Termination on or before the time required by law but in no event more than 30 days after the Officer's Date of Termination; and (ii) any vested benefits the Officer may have under any employee benefit plan of the Company through the Date of Termination, which vested benefits shall be paid and/or provided in accordance with the terms of such employee benefit plans (collectively, the "Accrued Benefit").

b. Termination by the Company Without Cause or by the Officer with Good Reason. During the Term, if the Officer's employment is terminated by the Company without Cause as provided in Section 3(b), or the Officer terminates his or her employment for Good Reason as provided in Section 3(c), then the Company shall provide the Officer with the Accrued Benefit and the compensation and benefits set forth in this Section 4(b), the latter subject to the Officer signing a separation agreement containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property, and non-disparagement, in a form and manner satisfactory to the Company (the "Separation Agreement and Release") and the Separation Agreement and Release becoming fully effective, all within the time frame set forth in the Separation Agreement and Release: (i) the Company shall pay the Officer an amount equal to 9 months of the Officer's Base Salary (the "Severance Amount"); (ii) if the Officer (and his or her dependents, if applicable) was participating in the Company's group health plans immediately prior to the Date of Termination and the Officer elects COBRA health continuation for himself or herself (and his or her dependents, if applicable), then the Company shall pay for 9 months or the Officer's COBRA health continuation period, whichever ends earlier, the COBRA health contribution that the Company would have made to provide health insurance to the Officer (and his or her dependents, if applicable) if the Officer had remained employed by the Company; provided, however, that the Company shall only be required to pay that percentage of dependent health insurance that the Company would be paying if the Officer had remained employed by the Company; (iii) 100% of the Officer's then-unvested stock options and restricted stock, if any, shall become immediately vested, and the Officer shall have 12 months from the Date of Termination in which to exercise his or her stock options (regardless of any language to the contrary in any stock plan then in effect); and (iv) the amounts payable under Sections 4(b)(i) and (ii) shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 9 months commencing within 30 days after the date the Separation Agreement and Release becomes fully effective; provided, however, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

c. Change of Control. During the Term, if within 12 months after a Change in Control as defined herein, the Officer's employment is terminated by the Company without Cause as provided in Section 3(b) or the Officer terminates his or her employment for Good Reason as provided in Section 3(c), then, subject to the signing of the Separation Agreement and. Release by the Officer and the Separation Agreement and Release becoming fully effective all within the time frame set forth in the Separation Agreement and Release, the Officer shall receive the benefits set forth in Section 4(b)(i), (ii), and (iii); provided, however, that notwithstanding the language in Section 4(b)(iv), the Severance Amount set forth in Section 4(b)(i) shall be payable as a lump sum within 5 business days after the Separation Agreement and Release becomes fully effective (for clarity, the COBRA payments set forth in Section 4(b)(ii) shall be paid in accordance with Section 4(b)(iv)). For purposes of this Section 4(c), "Change in Control" shall mean any of the following: (i) any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act") (other than the Company, any of its subsidiaries, or any trustee,

fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the Company); or (ii) the date a majority of the members of the Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or (iii) the consummation of (A) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than 50% of the voting shares of the Company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (B) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company. Notwithstanding the foregoing, a "Change in Control" shall not be deemed to have occurred for purposes of the foregoing clause solely as the result of an acquisition of securities by the Company that, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of Voting Securities beneficially owned by any person to 50% or more of the combined voting power of all of the then outstanding Voting Securities; provided, however, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly from the Company) and immediately thereafter beneficially owns 50% or more of the combined voting power of all of the then outstanding Voting Securities, then a "Change in Control" shall be deemed to have occurred.

5. Additional Limitations and Section 409A.

a. Additional Limitations. Notwithstanding anything to the contrary in this Agreement, in the event that the amount of any compensation, payment or distribution by the Company to or for the benefit of the Officer, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), and the applicable regulations thereunder (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Code, then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which the Officer becomes subject to the excise tax imposed by Section 4999 of the Code; provided that such reduction shall only occur if it would result in the Officer receiving a higher After Tax Amount (as defined below) than the Officer would receive if the Aggregate Payments were not subject to such reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G of the Code: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c). For purposes of this Section 5(a), the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on the Officer as a result of the Officer's receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, the Officer shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes. The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to Section 5(b)(i) shall be made by a nationally recognized accounting firm selected by the Company (the "Accounting Firm"), which shall provide detailed supporting calculations both to the Company and the Officer within 15 business days of the Date of Termination, if applicable, or at such earlier time as is reasonably requested by the Company or the Officer. Any determination by the Accounting Firm shall be binding upon the Company and the Officer.

b. Section 409A. Notwithstanding anything to the contrary in this Agreement, if at the time of the Officer's separation from service within the meaning of Section 409A of the Code, the Company determines that the Officer is a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that the Officer becomes entitled to under this Agreement on account of the Officer's separation from service would be considered deferred compensation otherwise subject to the 20% additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) 6 months and one day after the Officer's separation from service or (B) the Officer's death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by the Officer during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit. To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Officer's termination of employment, then such payments or benefits shall be payable only upon the Officer's "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h). The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party. The Company makes no representation or warranty and shall have no liability to the Officer or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section 409A.

6. Litigation and Regulatory Cooperation. During and after the Term, the Officer shall cooperate fully with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company that relate to events or occurrences that transpired while the Officer was employed by the Company. The Officer's full cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after the Term, the Officer also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while the Officer was employed by the Company. The Company shall reimburse the Officer for any reasonable out-of-pocket expenses incurred in connection with the Officer's performance of obligations pursuant to this Section 6 and, after his or her employment with the Company terminates, the Officer may be entitled for reasonable compensation for his or her time. For the avoidance of doubt, nothing in this Agreement shall be interpreted or applied to prohibit the Officer from making any good faith report to any governmental agency or other governmental entity concerning any act or omission that the Officer reasonably believes constitutes a possible violation of federal or state law or making other disclosures that are protected under the anti-retaliation or whistleblower provisions of applicable federal or state law or regulation.

7. Relief. The Officer agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Officer of this Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, the Officer agrees that if the Officer breaches, or proposes to breach, this Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company. In addition, in the event the Officer breaches the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement, dated [DATE], by and between the Company and the

Officer, during a period when he or she is receiving severance payments pursuant to Section 4(b) or (c), the Company shall have the right to suspend or terminate such severance payments. Such suspension or termination shall not limit the Company's other options with respect to relief for such breach and shall not relieve the Officer of his or her duties under this Agreement.

8. Governing Law and Jurisdiction. This Agreement shall be governed by the laws of the State of California, and the parties hereby consent to the jurisdiction of the state and federal courts in the State of California.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter, with the sole exception of the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement, dated April 29, 2015, and the Indemnification Agreement, dated April 29, 2015, both by and between the Company and the Officer. If there are any conflicts between the terms and conditions of the At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement and this Agreement, the terms and conditions of this Agreement shall govern.

10. Successor to the Officer. This Agreement shall inure to the benefit of and be enforceable by the Officer's personal representatives, executors, administrators, heirs, distributees, devisees and legatees. In the event of the Officer's death after his or her termination of employment but prior to the completion by the Company of all payments due him or her under this Agreement, the Company shall continue such payments to the Officer's beneficiary designated in writing to the Company prior to his or her death (or to his or her estate, if the Officer fails to make such designation).

11. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

12. Survival. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of the Officer's employment to the extent necessary to effectuate the terms contained herein.

13. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

14. Notices. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by a nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested, to the Officer at the last address the Officer has filed in writing with the Company or, in the case of the Company, at the address set forth above to the President and Chief Executive Officer with a copy to legalnotices@cariboubio.com; provided that if the Officer providing notice is the President and Chief Executive Officer, she is not required to provide notice to herself but instead shall provide written notice to the Chief Legal Officer.

15. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Officer and by a duly authorized representative of the Company.

16. Successor to Company. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and agree to perform this Agreement to the same extent that the Company would be required to perform it if no succession had taken place. Failure of the Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a material breach of this Agreement.

17. Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be taken to be an original; but such counterparts shall together constitute one and the same document.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz

Name: Rachel E. Haurwitz, Ph.D.

Title: President and CEO

Barbara G. McClung, J.D.

By: /s/ Barbara G. McClung

Exhibit 10.36

CONFIDENTIAL

AMENDMENT NO. 1 to OFFICER EMPLOYMENT AGREEMENT

This Amendment No. 1 to Officer Employment Agreement ("Amendment") is made April 10, 2019 ("Amendment Effective Date") and is by and between Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710 (the "Company"), and Barbara G. McClung, J.D. (the "Officer").

WHEREAS, the Company and the Officer have entered into an Officer Employment Agreement, having an Effective Date of June 30, 2017 (the "Agreement"); and

WHEREAS, the Company and the Officer desire to update the Agreement as set forth herein and in accordance with Section 15 of the Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Officer agree as follows:

1. The Agreement is amended to delete Section 7 in its entirety and replace it with the following Section 7:

   7. **Relief**. The Officer agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Officer of this Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, the Officer agrees that if the Officer breaches, or proposes to breach, this Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company. In addition, in the event the Officer breaches the Confidential Information and Invention Assignment Agreement, effective as of April 10, 2019, by and between the Company and the Officer ("CIIA"), during a period when he or she is receiving severance payments pursuant to Section 4(b) or (c), the Company shall have the right to suspend or terminate such severance payments. Such suspension or termination shall not limit the Company's other options with respect to relief for such breach and shall not relieve the Officer of his or her duties under this Agreement.

2. The Agreement is amended to delete Section 9 in its entirety and replace it with the following Section 9:

   9. **Integration**. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter, with the sole exception of the CIIA and the Indemnification Agreement, dated April 29, 2015, both by and between the Company and the Officer. If there are any conflicts between the terms and conditions of the CIIA and this Agreement, the terms and conditions of this Agreement shall govern.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 1 to Officer Employment Agreement as of the Amendment Effective Date.

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President & CEO

Barbara G. McClung, J.D.

By: /s/ Barbara G. McClung

Exhibit 10.37

[Caribou Biosciences, Inc. Letterhead]

Confidential

June 14, 2019

Barbara McClung
2901 Shasta Road
Berkeley, CA 94708

Dear Barbara:

In light of your contributions to the Company over the past year, the Board of Directors has approved an increase in your base salary to $365,000 effective July 1, 2019. Your new target bonus will be 35% effective for the 2019 bonus payment.

Thank you for your strategic leadership and continued service to Caribou. I look forward to tackling further challenges of our growing company with you.

Regards,

/s/ Rachel E. Haurwitz

Rachel E. Haurwitz, Ph. D.
President and CEO

Exhibit 10.39

CONFIDENTIAL

OFFICER EMPLOYMENT AGREEMENT

This Officer Employment Agreement ("Agreement") is made as February 8, 2021 ("Effective Date"), and is by and between Caribou Biosciences, Inc., a Delaware corporation, having an address at 2929 7th Street, Suite 105, Berkeley, CA 94710 (the "Company"), and Jason O'Byrne (the "Officer").

WHEREAS, the Company desires to employ the Officer and the Officer desires to be employed by the Company on the terms and conditions contained herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Employment.

a. Term. The term of this Agreement shall commence on the Effective Date and continue until terminated in accordance with the provisions hereof (the "Term").

b. Position and Duties. During the Term, the Officer shall serve as the Chief Financial Officer of the Company and shall have supervision and control over and responsibility for the day-to-day business and affairs of the Company as may from time to time be prescribed by the Company's Chief Executive Officer, provided that such duties are consistent with the Officer's position or other positions that they may hold from time to time. The Officer shall devote substantially all of their full working time and efforts to the business of the Company. Notwithstanding the foregoing, the Officer may serve on other boards of directors, with the approval of the Board, or sit on the governing boards of, or hold leadership positions related to community, charitable, academic, and religious activities, as long as such services and activities are disclosed to the Board and do not materially interfere with the Officer's performance of their duties to the Company as provided in this Agreement.

2. Compensation and Related Matters.

a. Base Salary. During the Term, the Officer's initial annual base salary shall be $385,000. The Officer's base salary shall be reviewed from time to time by the Company's Board of Directors ("Board") or the Compensation Committee of the Board. The base salary in effect at any given time is referred to herein as "Base Salary." The Base Salary shall be payable in a manner that is consistent with the Company's usual payroll practices.

b. Incentive Compensation. During the Term, the Officer shall be eligible to receive cash incentive compensation as determined by the Board or the Compensation Committee from time to time. The Officer's initial target annual incentive compensation shall be 35% of their Base Salary. Except as otherwise provided herein, to earn incentive compensation, the Officer must be employed by the Company on the day such incentive compensation is paid.

c. Company Benefits. The Officer shall be entitled to all benefits received by employees of the Company in accordance with the Company's policies and plans.

3. Termination. During the Term, the Officer's employment hereunder may be terminated without any breach of this Agreement under the following circumstances:

a. Termination by the Company for Cause. The Company may terminate the Officer's employment hereunder for Cause. For purposes of this Agreement, "Cause" shall mean: (i) conduct by the Officer constituting a material act of misconduct in connection with the performance of their duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary, and de minimis use of Company property for personal purposes; (ii) the commission by the Officer of any felony or a misdemeanor involving moral turpitude, deceit, dishonesty or fraud, or any conduct by the Officer that would reasonably be expected to result in material injury or reputational harm to the Company or any of its subsidiaries and affiliates if they were retained in their position; (iii) continued nonperformance by the Officer of their duties

hereunder (other than by reason of the Officer's physical or mental illness, incapacity or disability) that has continued for more than 30 days following written notice of such non-performance from the Board; (iv) a material violation by the Officer of the Company's written policies; or (v) failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the Company to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

b. Termination by the Company Without Cause. The Company may terminate the Officer's employment hereunder at any time without Cause upon written notice of such termination ("Notice of Termination"). Any termination by the Company of the Officer's employment under this Agreement which does not constitute a termination for Cause under Section 3(a) and does not result from the death or disability of the Officer under Section 3(d) or (e), respectively, shall be deemed a termination without Cause.

c. Termination by the Officer. The Officer may terminate their employment hereunder at any time for any reason, including but not limited to Good Reason. For purposes of this Agreement, "Good Reason" shall mean that the Officer has complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events: (i) a material diminution in the Officer's responsibilities, authority or duties; (ii) a decrease of more than 10% of the Officer's Base Salary except for across-the-board salary reductions based on the Company's financial performance similarly affecting all officers of the Company; (iii) a change by the Company in the Company location at which the Officer performs their duties to a location that is more than 50 miles (driving distance) from the original location; or (iv) the material breach of this Agreement by the Company. "Good Reason Process" shall mean that (i) the Officer reasonably determines in good faith that a "Good Reason" condition has occurred; (ii) the Officer notifies the Company in writing of the first occurrence of the Good Reason condition within 30 days of the first occurrence of such condition; (iii) the Officer cooperates in good faith with the Company's efforts, for a period of 30 days following such notice (the "Cure Period"), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) the Officer terminates their employment within 30 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

d. Death. The Officer's employment hereunder shall terminate upon their death.

e. Disability. The Company may terminate the Officer's employment if they are disabled and unable to perform the essential functions of the Officer's then existing position or positions under this Agreement with or without reasonable accommodation for a period of 180 days (which need not be consecutive) in any 12-month period and the Company shall provide a Notice of Termination at that time. If any question shall arise as to whether during any period the Officer is disabled so as to be unable to perform the essential functions of the Officer's then existing position or positions with or without reasonable accommodation, the Officer may, and at the request of the Company shall, submit to the Company a certification in reasonable detail by a physician selected by the Company to whom the Officer or the Officer's guardian has no reasonable objection as to whether the Officer is so disabled or how long such disability is expected to continue, and such certification shall for the purposes of this Agreement be conclusive of the issue. The Officer shall cooperate with any reasonable request of the physician in connection with such certification. If such question shall arise and the Officer shall fail to submit such certification, the Company's determination of such issue shall be binding on the Officer. Nothing in this Section 3(b) shall be construed to waive the Officer's rights, if any, under existing federal and state law including, without limitation, the Family and Medical Leave Act of 1993, 29 U.S.C. §2601, *et seq*. and the Americans with Disabilities Act, 42 U.S.C. §12101, *et seq.*

f. Notice of Termination. Except for termination as specified in Section 3(d), any termination of the Officer's employment by the Company or any such termination by the Officer shall be communicated by written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a written notice which shall indicate the specific termination provision in this Agreement relied upon.

g. Date of Termination. "Date of Termination" shall mean: (i) if the Officer's employment is terminated by the Company for Cause under Section 3(a) or without Cause under Section 3(b) or on account of disability under Section 3(e), the date on which Notice of Termination is given; (ii) if the Officer's employment is terminated by the Officer under Section 3(c) without Good Reason, 30 days after the date on which a Notice of

Termination is given; (iii) if the Officer's employment is terminated by the Officer under Section 3(c) with Good Reason, the date on which a Notice of Termination is given after the end of the Cure Period; and (iv) if the Officer's employment is terminated by their death, the date of their death. Notwithstanding the foregoing, in the event that the Officer gives a Notice of Termination to the Company under Section 3(c), the Company may unilaterally and solely at its own discretion accelerate the Date of Termination and such acceleration shall not result in a termination by the Company for purposes of this Agreement; provided, however, that in no event shall such accelerated Date of Termination be earlier than the date on which the Notice of Termination is delivered to the Company.

4. Compensation Upon Termination.

a. Termination Generally. If the Officer's employment with the Company is terminated for any reason, the Company shall pay or provide to the Officer (or to their authorized representative or estate) (i) any Base Salary earned through the Date of Termination, unpaid expense reimbursements in accordance with Company policy, and unused vacation that accrued through the Date of Termination on or before the time required by law but in no event more than 30 days after the Officer's Date of Termination; and (ii) any vested benefits the Officer may have under any employee benefit plan of the Company through the Date of Termination, which vested benefits shall be paid and/or provided in accordance with the terms of such employee benefit plans (collectively, the "Accrued Benefit").

b. Termination by the Company Without Cause or by the Officer with Good Reason. During the Term, if the Officer's employment is terminated by the Company without Cause as provided in Section 3(b), or the Officer terminates their employment for Good Reason as provided in Section 3(c), then the Company shall provide the Officer with the Accrued Benefit and the compensation and benefits set forth in this Section 4(b), the latter subject to the Officer signing a separation agreement containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property, and non-disparagement, in a form and manner satisfactory to the Company (the "Separation Agreement and Release") and the Separation Agreement and Release becoming fully effective, all within the time frame set forth in the Separation Agreement and Release: (i) the Company shall pay the Officer an amount equal to 9 months of the Officer's Base Salary (the "Severance Amount"); (ii) if the Officer (and their dependents, if applicable) was participating in the Company's group health plans immediately prior to the Date of Termination and the Officer elects COBRA health continuation for their self (and their dependents, if applicable), then the Company shall pay for 9 months or the Officer's COBRA health continuation period, whichever ends earlier, the COBRA health contribution that the Company would have made to provide health insurance to the Officer (and their dependents, if applicable) if the Officer had remained employed by the Company; provided, however, that the Company shall only be required to pay that percentage of dependent health insurance that the Company would be paying if the Officer had remained employed by the Company; (iii) 100% of the Officer's then-unvested stock options and restricted stock, if any, shall become immediately vested, and the Officer shall have 12 months from the Date of Termination in which to exercise their stock options (regardless of any language to the contrary in any stock plan then in effect); and (iv) the amounts payable under Sections 4(b)(i) and (ii) shall be paid out in substantially equal installments in accordance with the Company's payroll practice over 9 months commencing within 30 days after the date the Separation Agreement and Release becomes fully effective; provided, however, that the initial payment shall include a catch-up payment to cover amounts retroactive to the day immediately following the Date of Termination. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2).

c. Change of Control. During the Term, if within 12 months after a Change in Control as defined herein, the Officer's employment is terminated by the Company without Cause as provided in Section 3(b) or the Officer terminates their employment for Good Reason as provided in Section 3(c), then, subject to the signing of the Separation Agreement and Release by the Officer and the Separation Agreement and Release becoming fully effective all within the time frame set forth in the Separation Agreement and Release, the Officer shall receive the benefits set forth in Section 4(b)(i), (ii), and (iii); provided, however, that notwithstanding the language in Section 4(b)(iv), the Severance Amount set forth in Section 4(b)(i) shall be payable as a lump sum within 5 business days after the Separation Agreement and Release becomes fully effective (for clarity, the COBRA payments set forth in Section 4(b)(ii) shall be paid in accordance with Section 4(b)(iv)). For purposes of this Section 4(c), "Change in Control" shall mean any of the following: (i) any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act") (other than the Company, any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the

Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the Company); or (ii) the date a majority of the members of the Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or (iii) the consummation of (A) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than 50% of the voting shares of the Company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (B) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company. Notwithstanding the foregoing, a "Change in Control" shall not be deemed to have occurred for purposes of the foregoing clause solely as the result of an acquisition of securities by the Company that, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of Voting Securities beneficially owned by any person to 50% or more of the combined voting power of all of the then outstanding Voting Securities; provided, however, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly from the Company) and immediately thereafter beneficially owns 50% or more of the combined voting power of all of the then outstanding Voting Securities, then a "Change in Control" shall be deemed to have occurred.

5. Additional Limitations and Section 409A.

a. Additional Limitations. Notwithstanding anything to the contrary in this Agreement, in the event that the amount of any compensation, payment or distribution by the Company to or for the benefit of the Officer, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), and the applicable regulations thereunder (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Code, then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which the Officer becomes subject to the excise tax imposed by Section 4999 of the Code; provided that such reduction shall only occur if it would result in the Officer receiving a higher After Tax Amount (as defined below) than the Officer would receive if the Aggregate Payments were not subject to such reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G of the Code: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c). For purposes of this Section 5(a), the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on the Officer as a result of the Officer's receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, the Officer shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes. The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to Section 5(b)(i) shall be made by a nationally recognized accounting firm selected by the Company (the "Accounting Firm"), which shall provide detailed supporting calculations both to the Company and the Officer within 15 business days of the Date of Termination, if applicable, or at such earlier time as is reasonably requested by the Company or the Officer. Any determination by the Accounting Firm shall be binding upon the Company and the Officer.

b. Section 409A. Notwithstanding anything to the contrary in this Agreement, if at the time of the Officer's separation from service within the meaning of Section 409A of the Code, the Company determines that the Officer is a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any

payment or benefit that the Officer becomes entitled to under this Agreement on account of the Officer's separation from service would be considered deferred compensation otherwise subject to the 20% additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) 6 months and one day after the Officer's separation from service or (B) the Officer's death. If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by the Officer during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit. To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Officer's termination of employment, then such payments or benefits shall be payable only upon the Officer's "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h). The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party. The Company makes no representation or warranty and shall have no liability to the Officer or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section 409A.

6. Litigation and Regulatory Cooperation. During and after the Term, the Officer shall cooperate fully with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company that relate to events or occurrences that transpired while the Officer was employed by the Company. The Officer's full cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after the Term, the Officer also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while the Officer was employed by the Company. The Company shall reimburse the Officer for any reasonable out-of-pocket expenses incurred in connection with the Officer's performance of obligations pursuant to this Section 6 and, after their employment with the Company terminates, the Officer may be entitled for reasonable compensation for their time. For the avoidance of doubt, nothing in this Agreement shall be interpreted or applied to prohibit the Officer from making any good faith report to any governmental agency or other governmental entity concerning any act or omission that the Officer reasonably believes constitutes a possible violation of federal or state law or making other disclosures that are protected under the anti-retaliation or whistleblower provisions of applicable federal or state law or regulation.

7. Relief. The Officer agrees that it would be difficult to measure any damages caused to the Company which might result from any breach by the Officer of this Agreement, and that in any event money damages would be an inadequate remedy for any such breach. Accordingly, the Officer agrees that if the Officer breaches, or proposes to breach, this Agreement, the Company shall be entitled, in addition to all other remedies that it may have, to an injunction or other appropriate equitable relief to restrain any such breach without showing or proving any actual damage to the Company. In addition, in the event the Officer breaches the Confidential Information and Invention Assignment Agreement, effective as of [DATE], by and between the Company and the Officer ("CIIA"), during a period when they are receiving severance payments pursuant to Section 4(b) or (c), the Company shall have the right to suspend or terminate such severance payments. Such suspension or termination shall not limit the Company's other options with respect to relief for such breach and shall not relieve the Officer of their duties under this Agreement.

8. Governing Law and Jurisdiction. This Agreement shall be governed by the laws of the State of California, and the parties hereby consent to the jurisdiction of the state and federal courts in the State of California.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements between the parties concerning such subject matter, with the sole exception of the CIIA and the Indemnification Agreement, dated [DATE] both by and between the Company and the Officer. If there are any conflicts between the terms and conditions of the CIIA and this Agreement, the terms and conditions of this Agreement shall govern.

10. Successor to the Officer. This Agreement shall inure to the benefit of and be enforceable by the Officer's personal representatives, executors, administrators, heirs, distributees, devisees and legatees. In the event of the Officer's death after their termination of employment but prior to the completion by the Company of all payments due them under this Agreement, the Company shall continue such payments to the Officer's beneficiary designated in writing to the Company prior to their death (or to their estate, if the Officer fails to make such designation).

11. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

12. Survival. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of the Officer's employment to the extent necessary to effectuate the terms contained herein.

13. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

14. Notices. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by a nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested, to the Officer at the last address the Officer has filed in writing with the Company or, in the case of the Company, at the address set forth above to the President and Chief Executive Officer with a copy to legalnotices@cariboubio.com; provided that if the Officer providing notice is the President and Chief Executive Officer, they are not required to provide notice to themself but instead shall provide written notice to the Chief Legal Officer.

15. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Officer and by a duly authorized representative of the Company.

16. Successor to Company. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and agree to perform this Agreement to the same extent that the Company would be required to perform it if no succession had taken place. Failure of the Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a material breach of this Agreement.

17. Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be taken to be an original; but such counterparts shall together constitute one and the same document.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz

Name: Rachel E. Haurwitz

Title: President and CEO

Jason O'Byrne

By: /s/ Jason O'Byrne

CARIBOU BIOSCIENCES, INC.

2013 EQUITY INCENTIVE PLAN
(As amended and restated as of April 3, 2019)

1. Purposes of the Plan. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Employees, Directors and Consultants, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock and Restricted Stock Units.

2. Definitions. As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Applicable Laws" means all applicable laws, rules, regulations and requirements, including, but not limited to, the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan or Participants reside or provide services, as such laws, rules, and regulations shall be in effect from time to time.

(c) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, or Restricted Stock Units.

(d) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(e) "Board" means the Board of Directors of the Company.

(f) "Change in Control" means the occurrence of any of the following events:

(i) Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company, except that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board will not be considered a Change in Control and, if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(ii) Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(f), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(g) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein will be a reference to any successor or amended section of the Code.

(h) "Committee" means a committee of Directors or of other individuals appointed by the Board, or by the compensation committee of the Board, in compliance with Applicable Laws and in accordance with Section 4 hereof.

(i) "Common Stock" means the common stock of the Company. -2-

(j) "Company" means Caribou Biosciences, Inc., a Delaware corporation, or any successor thereto.

(k) "Consultant" means any person or entity, including an advisor but not an Employee, that renders, or has rendered, services to the Company or a Parent or Subsidiary and is compensated for such services.

(l) "Director" means a member of the Board.

(m) "Disability" means total and permanent disability as defined in Code Section 22(e)(3), provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time, provided, in making such determination, the Administrator shall do so in the manner required by, and consistent with, Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to the Award.

(n) "Employee" means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

(o) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(p) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have higher or lower exercise prices and different terms), Awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer

any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced or increased. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(q) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks were reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(r) "Incentive Stock Option" means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Code Section 422 and the regulations promulgated thereunder.

(s) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(t) "Option" means a stock option granted pursuant to the Plan.

(u) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(v) "Participant" means the holder of an outstanding Award or Shares received pursuant to an Award.

(w) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(x) "Plan" means this Amended and Restated 2013 Equity Incentive Plan, as the same may be amended and/or restated from time to time.

(y) "Restricted Stock" means Shares issued pursuant to an Award of Restricted Stock under Section 8 of the Plan, or issued pursuant to the early exercise of an Option.

(z) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(aa) "Service Provider" means an Employee, Director or Consultant.

(bb) "Share" means a share of the Common Stock, as adjusted in accordance with Section 14 of the Plan.

(cc) "Stock Appreciation Right" means an Award, granted alone or in connection with an Option, that pursuant to Section 7 is designated as a Stock Appreciation Right.

(dd) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Code Section 424(f).

3. Stock Subject to the Plan.

(a) Stock Subject to the Plan. Subject to the provisions of Section 14 of the Plan, the maximum aggregate number of Shares that may be subject to Awards and sold under the Plan is equal to the aggregate of 4,005,903 Shares, plus up to 250,000 Shares subject to stock options or similar awards granted under the Company's terminated 2012 Stock Option/Stock Issuance Plan (the "2012 Plan") that expire or otherwise terminate without having been exercised in full and Shares issued pursuant to awards granted under the 2012 Plan that are forfeited to or repurchased by the Company. The Shares may be authorized but unissued, or reacquired Common Stock.

(b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an Exchange Program, or, with respect to Restricted Stock or Restricted Stock Units, is forfeited to or repurchased by the Company at cost due to the failure to vest, the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights the forfeited or repurchased Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to Stock Appreciation Rights, only Shares actually issued pursuant to a Stock Appreciation Right will cease to be available under the Plan; all remaining Shares under Stock Appreciation Rights will remain available for future grant or sale under the Plan (unless the Plan has terminated). Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock or Restricted Stock Units are repurchased by the Company at cost or are forfeited to the Company due to the failure to vest, such Shares will become available for future grant under the Plan. Shares used to pay the exercise price of an Award or to satisfy the tax withholding obligations related to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 14, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3, plus, to the extent allowable under Code Section 422 and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan pursuant to Section 3(b).

(c) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which Committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of Shares to be covered by each Award granted hereunder;

(iv) to approve forms of Award Agreements for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder; such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to institute and determine the terms and conditions of an Exchange Program;

(vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan;

(ix) to approve addenda pursuant to Section 24 below or to grant Awards to, or to modify the terms of, any outstanding Award Agreement or any agreement related to any Restricted Stock or other Shares issued under the Plan and held by Participants who are foreign nationals or employed outside of the U.S. with such terms and conditions as the Administrator deems necessary or appropriate to accommodate differences in local law, tax policy or custom which deviate from the terms and conditions set forth in this Plan to the extent necessary or appropriate to accommodate such differences; and

(x) to modify or amend each Award (subject to Section 19(c) of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards and to extend the maximum term of an Option (subject to Section 6(d));

(xi) to allow Participants to satisfy tax obligations in any manner prescribed in Section 15;

(xii) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xiii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that otherwise would be due to such Participant under an Award; and

(xiv) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, and Restricted Stock Units may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Grant of Options. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Options in such amounts as the Administrator, in its sole discretion, will determine.

(b) Option Agreement. Each Award of an Option will be evidenced by an Award Agreement that will specify the exercise price, the term of the Option, the number of Shares subject to the Option, the exercise restrictions, if any, applicable to the Option, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(c) Limitations. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. Notwithstanding such designation, however, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand dollars ($100,000), such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(c), Incentive Stock Options will be taken into account in the order in which they were granted, the Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted, and calculation will be performed in accordance with Code Section 422 and Treasury Regulations promulgated thereunder.

(d) Term of Option. The term of each Option will be stated in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(e) Option Exercise Price and Consideration.

(i) Exercise Price. The per Share exercise price for the Shares to be issued pursuant to the exercise of an Option will be determined by the Administrator, but will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. In addition, in the case of an Incentive Stock Option granted to an Employee who owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing provisions of this Section 6(e)(i), Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Code Section 424(a).

(ii) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

(iii) Form of Consideration. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check; (3) promissory note, to the extent permitted by Applicable Laws, (4) other Shares, provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option will be exercised and provided further that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion; (5) consideration received by the Company under cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (6) by net exercise, (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, or (8) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator will consider if acceptance of such consideration may be reasonably expected to benefit the Company.

(f) Exercise of Option.

(i) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised and full satisfaction of any applicable taxes, withholding, required deductions or other required payments (or arrangements have been made to satisfy any such obligations), as determined by the Administrator, in its sole discretion. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 14 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(ii) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the Participant's termination as the result of the Participant's death or Disability, the Participant may exercise his or her Option within thirty (30) days of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent that the Option is vested. If after termination the Participant does not exercise his or her Option within the applicable time period, the Option will terminate, and any then vested or unvested Shares covered by such Option will revert to the Plan.

(iii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within six (6) months of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent the Option is vested. If after termination the Participant does not exercise his or her Option within the applicable time period, the Option will terminate, and any then vested or unvested Shares covered by such Option will revert to the Plan.

(iv) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within six (6) months following the Participant's death, or within such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent that the Option is vested, by the Participant's designated beneficiary, provided such beneficiary has been designated prior to the Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. If the Option is not so exercised within the applicable time period, the Option will terminate, and any then vested or unvested Shares covered by such Option will revert to the Plan.

7. Stock Appreciation Rights.

(a) Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) Number of Shares. The Administrator will have complete discretion to determine the number of Shares subject to any Award of Stock Appreciation Rights.

(c) Exercise Price and Other Terms. The per Share exercise price for the Shares that will determine the amount of the payment to be received upon exercise of a Stock Appreciation Right as set forth in Section 7(f) will be determined by the Administrator and will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. Otherwise, the Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan.

(d) Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the rules of Section 6(d) relating to the maximum term and Section 6(f) relating to exercise also will apply to Stock Appreciation Rights.

(f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

(i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times

(ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

8. Restricted Stock.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.

(c) Transferability. Except as provided in this Section 8 or as the Administrator determines and subject to Section 13, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) Removal of Restrictions. Except as otherwise provided in this Section 8, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction or at such other time as the Administrator may determine. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares, unless the Administrator provides otherwise. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

9. Restricted Stock Units.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the Administrator in its discretion.

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) determined by the Administrator and set forth in the Award Agreement. The Administrator, in its sole discretion, may settle earned Restricted Stock Units in cash, Shares, or a combination of both.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

10. Compliance With Code Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet, or be exempt from, the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator.

11. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months following the first (1st) day of such leave, any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

12. Limited Transferability of Awards.

(a) Unless determined otherwise by the Administrator, Awards may not be sold, pledged, assigned, hypothecated, or otherwise transferred in any manner other than by will or by the laws of descent and distribution, and may be exercised, during the lifetime of the Participant, only by the Participant. .

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act, an Option, or prior to exercise, the Shares subject to the Option, may not be pledged, hypothecated or otherwise transferred or disposed of, in any manner, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than to (i) persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act) through gifts or domestic relations orders, or (ii) to an executor or guardian of the Participant upon the death or disability of the Participant. Notwithstanding the foregoing sentence, the Administrator, in its sole discretion, may determine to permit transfers to the Company or in connection with a Change in Control or other acquisition transactions involving the Company to the extent permitted by Rule 12h-1(f).

13. Limited Transferability of Shares Underlying Awards

(a) General. Notwithstanding anything to the contrary, no Participant or other stockholder shall Transfer (as such term is defined below) any Shares (or any rights of or interests in such Shares) acquired pursuant to the Plan and/or any Award to any person or entity unless such Transfer is approved by the Company prior to such Transfer, which approval may be granted or withheld in the Company's sole and absolute discretion. "Transfer" shall mean, with respect to any security, the direct or indirect assignment, sale, transfer, tender, pledge, hypothecation, or the grant, creation or suffrage of a lien or encumbrance in or upon, or the gift, placement in trust, or the Constructive Sale (as such term is defined below) or other disposition of such security (including transfer by testamentary or intestate succession, merger or otherwise by operation of law) or any right, title or interest therein (including, but not limited to, any right or power to vote to which the holder thereof may be entitled, whether such right or power is granted by proxy or otherwise), or the record or beneficial ownership thereof, the offer to make such a sale, transfer, Constructive Sale or other disposition, and each agreement, arrangement or understanding, whether or not in writing, to effect any of the foregoing. "Constructive Sale" shall mean, with respect to any security, a short sale with respect to such security, entering into or acquiring an offsetting derivative contract with respect to such security, entering into or acquiring a futures or forward contract to deliver such security, or entering into any other hedging or other derivative transaction that has the effect of materially changing the economic benefits and risks of ownership. Any purported Transfer effected in violation of this Section 13 shall be null and void and shall have no force or effect and the Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of the Plan or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

(b) Approval Process. Any Participant or stockholder seeking the approval of the Company to Transfer some or all of its Shares shall give written notice thereof to the Secretary of the Company that shall include: (1) the name of the stockholder; (2) the proposed transferee; (3) the number of shares of the Transfer of which approval is thereby requested; and (4) the purchase price, if any, of the shares proposed for Transfer. The Company may require the Participant to supplement its notice with such additional information as the Company may request or as may otherwise be required by the applicable Award Agreement or other applicable written agreement. In addition, such request for Transfer shall be subject to such right of first refusal, transfer provisions and any other terms and conditions as may be set forth in the applicable Award Agreement or other applicable written agreement.

14. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of shares of stock that may be delivered under the Plan and/or the number, class, and price of shares of stock covered by each outstanding Award; provided, however, that the Administrator will make such adjustments to an Award required by Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to the Award.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Change in Control. In the event of a merger, consolidation or other capital reorganization or business combination transaction of the Company with or into another corporation, entity or person, or a Change in Control, each outstanding Award will be treated as the Administrator determines without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) the Participant's Awards (other than Awards of Restricted Stock) will terminate upon or immediately prior to the consummation of such merger or Change in Control for no consideration; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control; (iv) the termination of an Award or forfeiture of Shares of Restricted Stock that are unvested at the time of the transaction in exchange for an amount of cash and/or property, if any, equal to the excess of (1) the Fair Market Value of the Shares subject to the Awards or Restricted Stock as of the date of the occurrence of the transaction over (2) the exercise price or purchase price paid or to be paid for the Shares subject to the Awards or Restricted Stock; (v) the continuation of such outstanding Awards by the Company (if the Company is the surviving corporation; or (vi) any combination of the foregoing. In taking any of the actions permitted under this subsection 14(c), the Administrator will not be obligated to treat all outstanding Awards (or potion thereof), all Awards (or portion thereof) held by a Participant, or all Awards (or portion thereof) of the same type, similarly.

Notwithstanding anything in this Section 14(c) to the contrary, if a payment under an Award Agreement is subject to Code Section 409A and if the change in control definition contained in the Award Agreement does not comply with the definition of "change of control" for purposes of a distribution under Code Section 409A, then any payment of an amount that is otherwise accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Code Section 409A without triggering any penalties applicable under Code Section 409A.

15. Taxes.

(a) Taxes and Similar Obligations. As a condition of the grant, vesting and exercise of an Award, the Participant (or in the case of the Participant's death or a permitted transferee, the person holding or exercising the Award) shall make such arrangements as the Administrator may require for the satisfaction of any applicable U.S. federal, state, local or foreign tax, withholding, and any other required deductions or payments that may arise in connection with such Award. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied.

(b) Satisfaction of Obligations. To the extent permitted by Applicable Laws, the Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such taxes and other similar obligations, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld, (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the statutory amount required to be withheld, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, or (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld. Unless specifically permitted by the Administrator, any Shares withheld must be limited to avoid financial accounting charges under applicable accounting guidance, and any surrendered Shares must have been previously held for any minimum duration required to avoid financial accounting charges under applicable accounting guidance. Further, any surrender of Shares to the Company may be subject to restrictions, including, but not limited to, any restrictions required by rules of the Securities and Exchange Commission. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the obligations are required to be satisfied.

16. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

17. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator.

18. Term of Plan. The Plan will become effective upon its adoption by the Board. Unless sooner terminated under Section 19, it will continue in effect through and until April 3, 2029 unless terminated sooner under Section 19 below.

19. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

20. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

21. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

22. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

23. Information to Participants.

(a) In the event the Company is relying on the exemption provided by Rule 12h-1(f) under the Exchange Act, , and until such time as the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, is no longer relying on the exemption provided by Rule 12h-1(f)(1) under the Exchange Act or is no longer required to deliver information to Participants pursuant to Applicable Laws, the Company shall

provide to each Participant the information described in paragraphs (e)(3), (4), and (5) of Rule 701 under the Securities Act to the extent required by, and in accordance with, the requirements thereunder. The Company may request that Participants agree to keep the information to be provided pursuant to this section confidential. If a Participant does not agree to keep the information to be provided pursuant to this section confidential, then the Company will not be required to provide the information unless otherwise required pursuant to Rule 12h-1(f)(1) under the Exchange Act or other Applicable Laws.

(b) To the extent the Company is relying upon the exemption afforded by Section 25102(o) of the California Corporations Code with respect to any Award, the Company shall furnish summary financial information (audited or unaudited) of the Company's financial condition and results of operations, consistent with the requirements of Applicable Laws, at least annually to each applicable Participant during the period such Participant has one or more Awards outstanding, and in the case of an individual who acquired Shares pursuant to the Plan, during the period such Participant owns such Shares; provided, however, the Company shall not be required to provide such information if (i) the issuance is limited to key persons whose duties in connection with the Company assure their access to equivalent information or (ii) the Plan or any agreement complies with all conditions of Rule 701 of the Securities Act; provided that for purposes of determining such compliance, any registered domestic partner shall be considered a "family member" as that term is defined in Rule 701.

24. Addenda. The Administrator may approve such addenda to the Plan as it may consider necessary or appropriate for the purpose of granting Awards to Employees, Consultants or Directors, which Awards may contain such terms and conditions as the Administrator deems necessary or appropriate to accommodate differences in local law, tax policy or custom, which may deviate from the terms and conditions set forth in this Plan. The terms of any such addenda shall supersede the terms of the Plan to the extent necessary to accommodate such differences but shall not otherwise affect the terms of the Plan as in effect for any other purpose.

CARIBOU BIOSCIENCES, INC.

2013 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 2013 Equity Incentive Plan (the "Plan") shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name: _____

Address: _____

The undersigned Participant has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant: _____

Vesting Commencement Date: _____

Exercise Price per Share: $ _____

Total Number of Shares Granted: _____

Total Exercise Price: $ _____

Type of Option: _____ Incentive Stock Option

_____ Nonstatutory Stock Option

Term/Expiration Date: _____

Vesting Schedule :

This Option shall be exercisable, in whole or in part, according to the following vesting schedule:

[Twenty-five percent (25%) of the Shares subject to the Option shall vest on the one (1) year anniversary of the Vesting Commencement Date, and one forty-eighth(1/48) of the Shares subject to the Option shall vest each month thereafter on the same day of the month as the Vesting Commencement Date (and if there is no corresponding day, on the last day of the month), subject to Participant continuing to be a Service Provider through each such date.]

Termination Period :

This Option shall be exercisable for three (3) months after Participant ceases to be a Service Provider, unless such termination is due to Participant's death or Disability, in which case this Option shall be exercisable for twelve (12) months after Participant ceases to be a Service Provider. Notwithstanding the foregoing sentence, in no event may this Option be exercised after the Term/Expiration Date as provided above and this Option may be subject to earlier termination as provided in Section 13 of the Plan.

II. AGREEMENT

1. Grant of Option . The Administrator of the Company hereby grants to the Participant named in the Notice of Stock Option Grant in Part I of this Option Agreement ("Participant"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Stock Option Grant, at the exercise price per Share set forth in the Notice of Stock Option Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 18 of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Stock Option Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the $100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO"). Further, if for any reason this Option (or portion thereof) shall not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a NSO granted under the Plan. In no event shall the Administrator, the Company or any Parent or Subsidiary or any of their respective employees or directors have any liability to Participant (or any other person) due to the failure of the Option to qualify for any reason as an ISO.

2. Exercise of Option.

(a) Right to Exercise . This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Stock Option Grant and with the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") or in a manner and pursuant to such procedures as the Administrator may determine, which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised (the "Exercised Shares"), and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares, together with any applicable tax withholding. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price, together with any applicable tax withholding.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise comply with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Participant on the date on which the Option is exercised with respect to such Shares.

3. Participant's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), at the time this Option is exercised, Participant shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B .

4. Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the

Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section 4 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Option or shares acquired pursuant to the Option shall be bound by this Section 4.

5. Method of Payment . Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Participant:

(a) cash;

(b) check;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan; or

(d) surrender of other Shares which (i) shall be valued at its Fair Market Value on the date of exercise, and (ii) must be owned free and clear of any liens, claims, encumbrances or security interests, if accepting such Shares, in the sole discretion of the Administrator, shall not result in any adverse accounting consequences to the Company.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option.

(a) This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration of Options under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act (the "Reliance End Date"), Participant shall not transfer this Option or, prior to exercise, the Shares subject to this Option, in any manner other than (i) to persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act) through gifts or domestic relations orders, or (ii) to an executor or guardian of Participant upon the death or disability of Participant. Until the Reliance End Date, the Options and, prior to exercise, the Shares subject to this Option, may not be pledged, hypothecated or otherwise transferred or disposed of, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than as permitted in clauses (i) and (ii) of this paragraph.

8. Term of Option . This Option may be exercised only within the term set out in the Notice of Stock Option Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option Agreement.

9. Tax Obligations.

(a) Tax Withholding . Participant agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Participant) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements applicable to the Option exercise. Participant acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver the Shares if such withholding amounts are not delivered at the time of exercise.

(b) Notice of Disqualifying Disposition of ISO Shares. If the Option granted to Participant herein is an ISO, and if Participant sells or otherwise disposes of any of the Shares acquired pursuant to the ISO on or before the later of (i) the date two (2) years after the Date of Grant, or (ii) the date one (1) year after the date of exercise, Participant shall immediately notify the Company in writing of such disposition. Participant agrees that Participant may be subject to income tax withholding by the Company on the compensation income recognized by Participant.

(c) Code Section 409A. Under Code Section 409A, an Option that vests after December 31, 2004 (or that vested on or prior to such date but which was materially modified after October 3, 2004) that was granted with a per Share exercise price that is determined by the Internal Revenue Service (the "IRS") to be less than the Fair Market Value of a Share on the date of grant (a "discount option") may be considered "deferred compensation." An Option that is a "discount option" may result in (i) income recognition by Participant prior to the exercise of the Option, (ii) an additional twenty percent (20%) federal income tax, and (iii) potential penalty and interest charges. The "discount option" may also result in additional state income, penalty and interest tax to the Participant. Participant acknowledges that the Company cannot and has not guaranteed that the IRS will agree that the per Share exercise price of this Option equals or exceeds the Fair Market Value of a Share on the date of grant in a later examination. Participant agrees that if the IRS determines that the Option was granted with a per Share exercise price that was less than the Fair Market Value of a Share on the date of grant, Participant shall be solely responsible for Participant's costs related to such a determination.

10. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of California.

11. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT	CARIBOU BIOSCIENCES, INC.
Signature	By
Print Name	Print Name
Residence Address	Title

EXHIBIT A

2013 EQUITY INCENTIVE PLAN

EXERCISE NOTICE

Caribou Biosciences, Inc.
2929 7th Street, Suite 105
Berkeley, CA 94710

Attention: President

1. Exercise of Option. Effective as of today, _____ , _____ , the undersigned ("Participant") hereby elects to exercise Participant's option (the "Option") to purchase _____ shares of the Common Stock (the "Shares") of Caribou Biosciences, Inc. (the "Company") under and pursuant to the 2013 Equity Incentive Plan (the "Plan") and the Stock Option Agreement dated _____ ,_____(the "Option Agreement").

2. Delivery of Payment. Participant herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, and any and all withholding taxes due in connection with the exercise of the Option.

3. Representations of Participant. Participant acknowledges that Participant has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Common Stock subject to an Award, notwithstanding the exercise of the Option. The Shares shall be issued to Participant as soon as practicable after the Option is exercised in accordance with the Option Agreement. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 13 of the Plan.

5. Company's Right of First Refusal. Before any Shares held by Participant or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 5 (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section 5 shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 5, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, *provided* that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section 5 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section 5 notwithstanding, the transfer of any or all of the Shares during the Participant's lifetime or on the Participant's death by will or intestacy to the Participant's immediate family or a trust for the benefit of the Participant's immediate family shall be exempt from the provisions of this Section 5. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section 5, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 5.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

6. Tax Consultation. Participant understands that Participant may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that Participant has consulted with any tax consultants Participant deems advisable in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders .

(a) Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Notice shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Participant or by the Company forthwith to the Administrator, which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Exercise Notice shall continue in full force and effect.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant.

Submitted by:

PARTICIPANT

_____
Signature

_____
Print Name

Address:

_____

_____

_____

Accepted by:

CARIBOU BIOSCIENCES, INC.

By: _____

_____
Print Name

_____
Title

Address:

2929 7th Street, Suite 105
Berkeley, CA 94710

_____
Date Received

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :

COMPANY : CARIBOU BIOSCIENCES, INC.

SECURITY : COMMON STOCK

AMOUNT :

DATE :

In connection with the purchase of the above-listed Securities, the undersigned Participant represents to the Company the following:

(a) Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one (1) year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

(c) Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to Participant, the exercise shall be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

(d) Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

Signature

_____

Print Name

Date

CARIBOU BIOSCIENCES, INC.

2012 STOCK OPTION/STOCK ISSUANCE PLAN

ARTICLE ONE

GENERAL PROVISIONS

I. PURPOSE OF THE PLAN

This 2012 Stock Option/Stock Issuance Plan is intended to promote the interests of Caribou Biosciences, Inc., a Delaware corporation, by providing eligible persons in the Corporation's employ or service with the opportunity to acquire a proprietary interest, or otherwise increase their proprietary interest, in the Corporation as an incentive for them to continue in such employ or service.

Capitalized terms herein shall have the meanings assigned to such terms in the attached Appendix.

II. STRUCTURE OF THE PLAN

A. The Plan shall be divided into two (2) separate equity programs:

(i) the Option Grant Program under which eligible persons may, at the discretion of the Plan Administrator, be granted options to purchase shares of Common Stock, and

(ii) the Stock Issuance Program under which eligible persons may, at the discretion of the Plan Administrator, be issued shares of Common Stock directly, either through the immediate purchase of such shares or as a bonus for services rendered the Corporation (or any Parent or Subsidiary) or pursuant to restricted stock units or other share right awards which vest upon the completion of designated service periods or the attainment of pre-established performance milestones.

B. The provisions of Articles One and Four shall apply to both equity programs under the Plan and shall accordingly govern the interests of all persons under the Plan.

III. ADMINISTRATION OF THE PLAN

A. The Plan shall be administered by the Board. However, any or all administrative functions otherwise exercisable by the Board may be delegated to the Committee. Members of the Committee shall serve for such period of time as the Board may determine and shall be subject to removal by the Board at any time. The Board may also at any time terminate the functions of the Committee and reassume all powers and authority previously delegated to the Committee.

B. The Plan Administrator shall have full power and authority (subject to the provisions of the Plan) to establish such rules and regulations as it may deem appropriate for proper administration of the Plan and to make such determinations under, and issue such interpretations of, the Plan and any outstanding options or stock issuances thereunder as it may deem necessary or advisable. Decisions of the Plan Administrator shall be final and binding on all parties who have an interest in the Plan or any option grant or stock issuance thereunder.

IV. ELIGIBILITY

A. The persons eligible to participate in the Plan are as follows:

(i) Employees,

(ii) non-employee members of the Board or the non-employee members of the board of directors of any Parent or Subsidiary, and

(iii) consultants and other independent advisors who provide services to the Corporation (or any Parent or Subsidiary).

B. The Plan Administrator shall have full authority to determine, (i) with respect to the grants made under the Option Grant Program, which eligible persons are to receive such grants, the time or times when those grants are to be made, the number of shares to be covered by each such grant, the status of the granted option as either an Incentive Option or a Non-Statutory Option, the time or times when each option is to become exercisable, the vesting schedule (if any) applicable to the option shares and the maximum term for which the option is to remain outstanding, and (ii) with respect to stock issuances or other stock-based awards under the Stock Issuance Program, which eligible persons are to receive such issuances or awards, the time or times when those issuances or awards are to be made, the number of shares subject to each such issuance or award, the applicable vesting schedule and the cash consideration (if any) to be paid by the Participant for such shares.

C. The Plan Administrator shall have the absolute discretion either to grant options in accordance with the Option Grant Program or to effect stock issuances in accordance with the Stock Issuance Program.

V. STOCK SUBJECT TO THE PLAN

A. The stock issuable under the Plan shall be shares of authorized but unissued or reacquired Common Stock. The maximum number of shares of Common Stock which may be issued over the term of the Plan shall not exceed 650,000 shares.

B. Shares of Common Stock subject to outstanding options, restricted stock units or share right awards shall be available for subsequent issuance under the Plan to the extent (i) those options, units or awards expire, terminate or are cancelled for any reason prior to the issuance of the underlying shares of Common Stock or (ii) such options are cancelled in accordance with the cancellation-regrant provisions of Article Two. Unvested shares issued than the option exercise or direct issue price paid per share, pursuant to the Corporation's repurchase rights under the Plan shall be added back to the number of shares of Common Stock reserved for issuance under the Plan and shall accordingly be available for reissuance through one or more subsequent option grants or direct stock issuances under the Plan.

C. Should any change be made to the Common Stock by reason of any stock split, stock dividend, spin-off transaction, extraordinary distribution (whether in cash, securities or other property), recapitalization, combination of shares, exchange of shares or other similar transaction affecting the outstanding Common Stock without the Corporation's receipt of consideration or in the event of a substantial reduction to the value of the outstanding shares of Common Stock by reason of a spin-off transaction or extraordinary distribution or in the event of any merger, consolidation or other reorganization, then equitable adjustments shall be made to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the number and/or class of securities and the exercise price per share in effect under each outstanding option, (iii) the number and/or class of securities subject to each outstanding restricted stock unit or other share right award and the cash consideration (if any) payable per share and (iv) the number and/or class of securities subject to the Corporation's outstanding repurchase rights under the Plan and the repurchase price payable per share. In the event of a Change in Control, the provisions of Article Two, Section III shall apply. The adjustments shall be made by the Plan Administrator in such manner as the Plan Administrator deems appropriate, and those adjustments shall be final, binding and conclusive. In no event shall any such adjustments be made in connection with the conversion of one or more outstanding shares of the Corporation's preferred stock into shares of Common Stock.

ARTICLE TWO

OPTION GRANT PROGRAM

I. OPTION TERMS

Each option shall be evidenced by one or more documents in the form approved by the Plan Administrator; provided, however, that each such document shall comply with the terms specified below. Each document evidencing an Incentive Option shall, in addition, be subject to the provisions of the Plan applicable to such options.

A. Exercise Price.

1. The exercise price per share shall be fixed by the Plan Administrator but shall not be less than one hundred percent (100%) of the Fair Market Value per share of Common Stock on the option grant date.

2. The exercise price shall become immediately due upon exercise of the option and shall, subject to the provisions of Section I of Article Four and the documents evidencing the option, be payable in cash or check made payable to the Corporation. Should the Common Stock be registered under Section 12 of the 1934 Act at the time the option is exercised, then the exercise price may also be paid as follows:

(i) in shares of Common Stock valued at Fair Market Value on the Exercise Date and held for the period (if any) necessary to avoid a charge to the Corporation's earnings for financial reporting purposes, or

(ii) to the extent the option is exercised for vested shares, through a special sale and remittance procedure pursuant to which the Optionee shall concurrently provide irrevocable instructions (A) to a brokerage firm (reasonably satisfactory to the Corporation for purposes of administering such procedure in compliance with any applicable pre-clearance or pre-notification requirements) to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased shares plus all applicable income and employment taxes required to be withheld by the Corporation by reason of such exercise and (B) to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm on the settlement date in order to complete the sale.

Except to the extent such sale and remittance procedure is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

B. Exercise and Term of Options. Each option shall be exercisable at such time or times, during such period and for such number of shares as shall be determined by the Plan Administrator and set forth in the documents evidencing the option grant. However, no option shall have a term in excess of ten (10) years measured from the option grant date.

C. Effect of Termination of Service.

1. The following provisions shall govern the exercise of any options held by the Optionee at the time of cessation of Service or death:

(i) Should the Optionee cease to remain in Service for any reason other than death, Disability or Misconduct, then the Optionee shall have a period of three (3) months from the date of such cessation of Service during which to exercise each outstanding option held by such Optionee.

(ii) Should the Optionee's Service terminate by reason of Disability, then the Optionee shall have a period of twelve (12) months from the date of such cessation of Service during which to exercise each outstanding option held by such Optionee.

(iii) If the Optionee dies while holding an outstanding option, then the personal representative of his or her estate or the person or persons to whom the option is transferred pursuant to the Optionee's will or the laws of inheritance or the Optionee's designated beneficiary or beneficiaries of that option shall have a twelve (12)-month period from the date of the Optionee's death to exercise such option.

(iv) Under no circumstances, however, shall any such option be exercisable after the specified expiration of the option term.

(v) During the applicable post-Service exercise period, the option may not be exercised in the aggregate for more than the number of vested shares for which the option is at the time exercisable. No additional shares shall vest under the option following the Optionee's cessation of Service, except to the extent (if any) specifically authorized by the Plan Administrator in its sole discretion pursuant to an express written agreement with the Optionee. Upon the expiration of the applicable exercise period or (if earlier) upon the expiration of the option term, the option shall terminate and cease to be outstanding.

(vi) Should the Optionee's Service be terminated for Misconduct or should the Optionee otherwise engage in Misconduct while holding one or more outstanding options under the Plan, then all those options shall terminate immediately and cease to remain outstanding.

2. The Plan Administrator shall have the discretion, exercisable either at the time an option is granted or at any time while the option remains outstanding, to:

(i) extend the period of time for which the option is to remain exercisable following the Optionee's cessation of Service or death from the limited period otherwise in effect for that option to such greater period of time as the Plan Administrator shall deem appropriate, but in no event beyond the expiration of the option term, and/or

(ii) permit the option to be exercised, during the applicable post-Service exercise period, not only with respect to the number of vested shares of Common Stock for which such option is exercisable at the time of the Optionee's cessation of Service but also with respect to one or more additional installments in which the Optionee would have vested under the option had the Optionee continued in Service.

D. Stockholder Rights. The holder of an option shall have no stockholder rights with respect to the shares subject to the option until such person shall have exercised the option, paid the exercise price and become the recordholder of the purchased shares.

E. Unvested Shares. The Plan Administrator shall have the discretion to grant options which are exercisable for unvested shares of Common Stock. Should the Optionee cease Service while holding such unvested shares, the Corporation shall have the right to repurchase any or all of those unvested shares at a price per share equal to the lower of (i) the exercise price paid per share or (ii) the Fair Market Value per share of Common Stock at the time of the Optionee's cessation of Service. The terms upon which such repurchase right shall be exercisable (including the period and procedure for exercise and the appropriate vesting schedule for the purchased shares) shall be established by the Plan Administrator and set forth in the document evidencing such repurchase right.

F. First Refusal Rights. Until such time as the Common Stock is first registered under Section 12 of the 1934 Act, the Corporation shall have the right of first refusal with respect to any proposed disposition by the Optionee (or any successor in interest) of any shares of Common Stock issued under the Plan. Such right of first refusal shall be exercisable in accordance with the terms established by the Plan Administrator and set forth in the document evidencing such right.

G. Limited Transferability of Options.

1. An Incentive Stock Option shall be exercisable only by the Optionee during his or her lifetime, and such Incentive Stock Option, together with the shares of Common Stock subject to that option during the period prior to exercise, shall not be assignable or transferable other than by will or by the laws of inheritance following the Optionee's death.

2. A Non-Statutory Option, together with the shares of Common Stock subject to that option during the period prior to exercise, shall be subject to the same transfer restrictions as set forth in subparagraph 1 above, except that a Non-Statutory Option, together with the underlying unexercised shares of Common Stock, may to the extent permitted by the Plan Administrator be assigned in whole or in part during the Optionee's lifetime by gift or pursuant to a domestic relations order to one or more of the Optionee's Family Members or to a trust established exclusively for the Optionee and/or one or more such Family Members. The assigned portion may only be exercised by the person or persons who acquire a proprietary interest in the Non-Statutory Option pursuant to the assignment. The terms applicable to the assigned portion shall be the same as those in effect for the option immediately prior to such assignment and shall be set forth in such documents issued to the assignee as the Plan Administrator may deem appropriate.

3. Notwithstanding subparagraphs 1 and 2 above, the Optionee may also, to the extent permitted by the Plan Administrator, designate one or more Family Members as the beneficiary or beneficiaries of his or her outstanding options under the Plan, and those options shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding those options. Such beneficiary or beneficiaries shall take the transferred options subject to all the terms and conditions of the applicable agreement evidencing each such transferred option, including (without limitation) the limited time period during which the option may be exercised following the Optionee's death.

4. Prior to the date the Corporation first becomes subject to the reporting requirements of Section 13 or 15(d) of the 1934 Act, outstanding options under the Plan, together with the shares of Common Stock subject to those options during the period prior to exercise, shall not be the subject of any short position, put equivalent position (as such term is defined in Rule 16a-1(h) under the 1934 Act) or call equivalent position (as such term is defined Rule 16a-1(b) of the 1934 Act).

5. Except as otherwise provided in subparagraph 1, 2 or 3 above, until the date the Corporation first becomes subject to the reporting requirements of Section 13 or 15(d) of the 1934 Act, outstanding options under the Plan, together with the shares of Common Stock subject to those options during the period prior to exercise, shall not be the subject of any pledges, gifts, hypothecations or other transfers, other than pursuant to the Corporation's repurchase rights or in connection with a Change in Control of the Corporation in which such options shall terminate and cease to be outstanding.

II. INCENTIVE OPTIONS

The terms specified below shall be applicable to all Incentive Options. Except as modified by the provisions of this Section II, all the provisions of Articles One, Two and Four shall be applicable to Incentive Options. Options which are specifically designated as Non-Statutory Options shall not be subject to the terms of this Section II.

A. Eligibility. Incentive Options may only be granted to Employees.

B. Dollar Limitation. The aggregate Fair Market Value of the shares of Common Stock (determined as of the respective date or dates of grant) for which one or more options granted to any Employee under the Plan (or any other option plan of the Corporation or any Parent or Subsidiary) may for the first time become exercisable as Incentive Options during any one (1) calendar year shall not exceed the sum of One Hundred Thousand

Dollars ($100,000). To the extent the Employee holds two (2) or more such options which become exercisable for the first time in the same calendar year, the foregoing limitation on the exercisability of such options as Incentive Options shall be applied on the basis of the order in which such options are granted, except to the extent otherwise provided under applicable law or regulation.

C. 10% Stockholder. If any Employee to whom an Incentive Option is granted is a 10% Stockholder, then the option term shall not exceed five (5) years measured from the option grant date, and the exercise price per share shall not be less than one hundred ten percent (110%) of the Fair Market Value per share of Common Stock on the option grant date.

III. CHANGE IN CONTROL

A. The shares subject to each option outstanding under the Plan at the time of a Change in Control shall automatically vest in full so that each such option shall, immediately prior to the effective date of the Change in Control, become exercisable for all of the shares of Common Stock at the time subject to that option and may be exercised for any or all of those shares as fully-vested shares of Common Stock. However, the shares subject to an outstanding option shall not vest on such an accelerated basis if and to the extent: (i) such option is assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction and any repurchase rights of the Corporation with respect to any unvested shares purchasable under the option are concurrently assigned to such successor corporation (or parent thereof) or otherwise continued in effect or (ii) such option is to be replaced with a cash retention program of the Corporation or any successor corporation which preserves the spread existing on the unvested option shares at the time of the Change in Control (the excess of the Fair Market Value of those shares over the aggregate exercise price payable for such shares) and provides for subsequent payout of that spread in accordance with the same vesting schedule applicable to those unvested option shares but only if such replacement cash program would not result in the treatment of the Award as an item of deferred compensation subject to Code Section 409A or (iii) the acceleration of such option is subject to other limitations imposed by the Plan Administrator at the time of the option grant.

B. All outstanding repurchase rights shall also terminate automatically, and the shares of Common Stock subject to those terminated rights shall immediately vest in full, in the event of any Change in Control, except to the extent: (i) those repurchase rights are assigned to the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction or (ii) such accelerated vesting is precluded by other limitations imposed by the Plan Administrator at the time the repurchase right is issued.

C. Immediately following the consummation of the Change in Control, all outstanding options shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise continued in effect pursuant to the terms of the Change in Control transaction.

D. Each option which is assumed in connection with a Change in Control or otherwise continued in effect shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to the Optionee in consummation of such Change in Control, had the option been exercised immediately prior to such Change in Control. Appropriate adjustments shall also be made to (i) the number and class of securities available for issuance under the Plan following the consummation of such Change in Control and (ii) the exercise price payable per share under each outstanding option, provided the aggregate exercise price payable for such securities shall remain the same. To the extent the actual holders of the Corporation’s outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption or continuation of the outstanding options under this Plan, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control.

E. The Plan Administrator shall have the discretion, exercisable either at the time the option is granted or at any time while the option remains outstanding, to structure one or more options so that those options shall automatically accelerate and vest in full (and any repurchase rights of the Corporation with respect to the unvested shares subject to those options shall immediately terminate) upon the occurrence of a Change in Control, whether or not those options are to be assumed in the Change in Control or otherwise continued in effect.

F. The Plan Administrator shall also have full power and authority, exercisable either at the time the option is granted or at any time while the option remains outstanding, to structure such option so that the shares subject to that option will automatically vest on an accelerated basis should the Optionee's Service terminate by reason of an Involuntary Termination within a designated period (not to exceed eighteen (18) months) following the effective date of any Change in Control in which the option is assumed or otherwise continued in effect and the repurchase rights applicable to those shares do not otherwise terminate. Any option so accelerated shall remain exercisable for the fully-vested option shares until the expiration or sooner termination of the option term. In addition, the Plan Administrator may provide that one or more of the Corporation's outstanding repurchase rights with respect to shares held by the Optionee at the time of such Involuntary Termination shall immediately terminate on an accelerated basis, and the shares subject to those terminated rights shall accordingly vest at that time.

G. The portion of any Incentive Option accelerated in connection with a Change in Control shall remain exercisable as an Incentive Option only to the extent the applicable One Hundred Thousand Dollar ($100,000) limitation is not exceeded. To the extent such dollar limitation is exceeded, the accelerated portion of such option shall be exercisable as a Non-Statutory Option under the Federal tax laws.

H. The grant of options under the Plan shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

IV. CANCELLATION AND REGRANT OF OPTIONS

The Plan Administrator shall have the authority to effect, at any time and from time to time, with the consent of the affected option holders, the cancellation of any or all outstanding options under the Plan and to grant in substitution therefor new options covering the same or different number of shares of Common Stock but with an exercise price per share based on the Fair Market Value per share of Common Stock on the new option grant date.

V. FINANCIAL STATEMENTS

In the event there are at any time five hundred (500) or more holders of outstanding options under the Plan, the Corporation shall provide to each such option holder, at the time the outstanding options first become held by five hundred (500) holders and at successive six (6)-month intervals thereafter, financial statements that meet the requirements of Rule 701(e)(4) under the 1933 Act and that are at the time of distribution not more than one hundred and eighty (180) days old. Such obligation shall continue until such time as the Corporation becomes subject to the reporting requirements of Section 13 or 15(d) of the 1934 Act or (if earlier) no longer relies on the exemption from such reporting requirements provided by Rule 12h-1(g) under the 1934 Act.

ARTICLE THREE

STOCK ISSUANCE PROGRAM

I. STOCK ISSUANCE TERMS

Shares of Common Stock may be issued under the Stock Issuance Program through direct and immediate issuances without any intervening option grants. Each such stock issuance shall be evidenced by a Stock Issuance Agreement which complies with the terms specified below. Shares of Common Stock may also be issued under the Stock Issuance Program pursuant to share right awards or restricted stock units.

A. Issue Price.

1. The issue price per share shall be fixed by the Plan Administrator but shall not be less than one hundred percent (100%) of the Fair Market Value per share of Common Stock on the issue date.

2. Subject to the provisions of Section I of Article Four, shares of Common Stock may be issued under the Stock Issuance Program for any of the following items of consideration which the Plan Administrator may deem appropriate in each individual instance:

(i) cash or check made payable to the Corporation,

(ii) past services rendered to the Corporation (or any Parent or Subsidiary), or

(iii) any other valid consideration under the Delaware General Corporation Law.

B. Vesting Provisions.

1. Shares of Common Stock issued under the Stock Issuance Program may, in the discretion of the Plan Administrator, be fully and immediately vested upon issuance or may vest in one or more installments over the Participant's period of Service or upon attainment of specified performance objectives. Shares of Common Stock may also be issued under the Stock Issuance Program pursuant to share right awards or restricted stock units which entitle the recipients to receive the shares underlying those awards or units upon the attainment of designated performance goals or the satisfaction of specified Service requirements or upon the expiration of a designated time period following the vesting of those awards or units, including (without limitation) a deferred distribution date following the termination of the Participant's Service.

2. Any new, substituted or additional securities or other property (including money paid other than as a regular cash dividend) which the Participant may have the right to receive with respect to the Participant's unvested shares of Common Stock by reason of any stock dividend, stock split, spin-off transaction, extraordinary distribution (whether in cash, securities or other property), recapitalization, combination of shares, exchange of shares or other similar change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration shall be issued subject to (i) the same vesting requirements applicable to the Participant's unvested shares of Common Stock and (ii) such escrow arrangements as the Plan Administrator shall deem appropriate.

3. The Participant shall have full stockholder rights with respect to any shares of Common Stock issued to the Participant under the Stock Issuance Program, whether or not the Participant's interest in those shares is vested. Accordingly, the Participant shall have the right to vote such shares and to receive any regular cash dividends paid on such shares. The Participant shall not have any stockholder rights with respect to the shares of Common Stock subject to a share right award or restricted stock unit until that award or unit vests and the shares of Common Stock are actually issued thereunder. However, dividend-equivalent units may be paid or credited, either in cash or in actual or phantom shares of Common Stock, on outstanding share right awards or restricted stock units, subject to such terms and conditions as the Plan Administrator may deem appropriate.

4. Should the Participant cease to remain in Service while holding one or more unvested shares of Common Stock issued under the Stock Issuance Program or should the performance objectives not be attained with respect to one or more such unvested shares of Common Stock, then those shares shall be immediately surrendered to the Corporation for cancellation, and the Participant shall have no further stockholder rights with respect to those shares. To the extent the surrendered shares were previously issued to the Participant for consideration paid in cash or cash equivalent (including the Participant's purchase-money indebtedness), the Corporation shall repay to the Participant the lower of (i) the cash consideration paid for the surrendered shares or (ii) the Fair Market Value of those shares at the time of Participant's cessation of Service and shall cancel the unpaid principal balance of any outstanding purchase-money note of the Participant attributable to such surrendered shares by the applicable clause (i) or (ii) amount.

5. The Plan Administrator may in its discretion waive the surrender and cancellation of one or more unvested shares of Common Stock (or other assets attributable thereto) which would otherwise occur upon the non-completion of the vesting schedule applicable to those shares. Such waiver shall result in the immediate vesting of the Participant's interest in the shares of Common Stock as to which the waiver applies. Such waiver may be effected at any time, whether before or after the Participant's cessation of Service or the attainment or non-attainment of the applicable performance objectives.

6. Outstanding share right awards or restricted stock units shall automatically terminate, and no shares of Common Stock shall actually be issued in satisfaction of those awards or units, if the performance goals or Service requirements established for such awards or units are not attained or satisfied. The Plan Administrator, however, shall have the discretionary authority to issue vested shares of Common Stock under one or more outstanding share right awards or restricted stock units as to which the designated performance goals or Service requirements have not been attained or satisfied.

C. First Refusal Rights. Until such time as the Common Stock is first registered under Section 12 of the 1934 Act, the Corporation shall have the right of first refusal with respect to any proposed disposition by the Participant (or any successor in interest) of any shares of Common Stock issued under the Stock Issuance Program. Such right of first refusal shall be exercisable in accordance with the terms established by the Plan Administrator and set forth in the document evidencing such right.

II. CHANGE IN CONTROL

A. Upon the occurrence of a Change in Control, all outstanding repurchase rights under the Stock Issuance Program shall terminate automatically, and the shares of Common Stock subject to those terminated rights shall immediately vest in full, except to the extent: (i) those repurchase rights are assigned to the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction or (ii) such accelerated vesting is precluded by other limitations imposed by the Plan Administrator at the time the repurchase right is issued.

B. Each share right award or restricted stock unit outstanding at the time of a Change in Control may be (i) assumed by the successor corporation (or parent thereof) or otherwise continued in effect pursuant to the terms of such Change in Control transaction or (ii) replaced with a cash incentive program of the successor program which preserves the Fair Market Value of the Common Stock underlying that award or unit at the time of the Change in Control and provides for subsequent payout of that dollar amount in accordance with the vesting schedule in effect for such award or unit at the time of the Change in Control. If any such share right award or restricted stock unit is not so assumed or otherwise continued in effect, or if such award or unit is not replaced with a cash retention award, then such award or unit shall vest, and the shares of Common Stock subject to such award or unit shall become issuable, immediately prior to the consummation of the Change in Control.

C. Each share right award or restricted stock unit which is so assumed or otherwise continued in effect shall be adjusted immediately after the consummation of that Change in Control so as to apply to the number and class of securities into which the shares of Common Stock subject to the award or unit immediately prior to the

Change in Control would have been converted in consummation of such Change in Control had those shares actually been outstanding at that time. Appropriate adjustments shall also be made to the cash consideration (if any) price payable per share under each outstanding share right award or restricted stock unit, provided the aggregate cash consideration payable for such securities shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption or continuation of the outstanding share right awards or restricted stock units, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control transaction.

D. The Plan Administrator shall have the discretionary authority to structure one or more unvested stock issuances or one or more share right awards or restricted stock units under the Stock Issuance Program so that the shares of Common Stock subject to those issuances or awards or units shall automatically vest (or vest and become issuable) in whole or in part immediately upon the occurrence of a Change in Control or upon the subsequent termination of the Participant's Service by reason of an Involuntary Termination within a designated period (not to exceed eighteen (18) months) following the effective date of that Change in Control transaction.

III. SHARE ESCROW/LEGENDS

Unvested shares may, in the Plan Administrator's discretion, be held in escrow by the Corporation until the Participant's interest in such shares vests or may be issued directly to the Participant with restrictive legends on the certificates evidencing those unvested shares.

ARTICLE FOUR

MISCELLANEOUS

I. FINANCING

The Plan Administrator may permit any Optionee or Participant to pay the option exercise price under the Option Grant Program or the purchase price for shares issued under the Stock Issuance Program by delivering a full-recourse promissory note payable in one or more installments which bears interest at a market rate and is secured by the purchased shares. In no event, however, may the maximum credit available to the Optionee or Participant exceed the sum of (i) the aggregate option exercise price or purchase price payable for the purchased shares plus (ii) any applicable income and employment tax liability incurred by the Optionee or the Participant in connection with the option exercise or share purchase.

II. EFFECTIVE DATE AND TERM OF PLAN

A. The Plan shall become effective when adopted by the Board, but no option granted under the Plan may be exercised, and no shares shall be issued under the Plan, until the Plan is approved by the Corporation's stockholders. If such stockholder approval is not obtained within twelve (12) months after the date of the Board's adoption of the Plan, then all options previously granted under the Plan shall terminate and cease to be outstanding, and no further options shall be granted and no shares shall be issued under the Plan. Subject to such limitation, the Plan Administrator may grant options and issue shares under the Plan at any time after the effective date of the Plan and before the date fixed herein for termination of the Plan.

B. The Plan shall terminate upon the earliest of (i) the expiration of the ten (10)-year period measured from the date the Plan is adopted by the Board, (ii) the date on which all shares available for issuance under the Plan shall have been issued as vested shares or (iii) the termination of all outstanding awards under the Plan in connection with a Change in Control. All awards and unvested stock issuances outstanding at the time of a clause (i) termination event shall continue to have full force and effect in accordance with the provisions of the documents evidencing those awards or issuances.

III. AMENDMENT OF THE PLAN

A. The Board shall have complete and exclusive power and authority to amend or modify the Plan in any or all respects. However, no such amendment or modification shall adversely affect the rights and obligations with respect to awards or unvested stock issuances at the time outstanding under the Plan unless the Optionee or the Participant consents to such amendment or modification. In addition, certain amendments may require stockholder approval pursuant to applicable laws and regulations.

B. Options may be granted under the Option Grant Program and awards and shares may be issued under the Stock Issuance Program which are in each instance in excess of the number of shares of Common Stock then available for issuance under the Plan, provided any excess shares actually issued under those programs shall be held in escrow until there is obtained stockholder approval of an amendment sufficiently increasing the number of shares of Common Stock available for issuance under the Plan. If such stockholder approval is not obtained within twelve (12) months after the date the first such excess grants or issuances are made, then (i) any unexercised options granted on the basis of such excess shares shall terminate and cease to be outstanding and (ii) the Corporation shall promptly refund to the Optionees and the Participants the exercise or purchase price paid for any excess shares issued under the Plan and held in escrow, together with interest (at the applicable Short Term Federal Rate) for the period the shares were held in escrow, and such shares shall thereupon be automatically cancelled and cease to be outstanding.

IV. USE OF PROCEEDS

Any cash proceeds received by the Corporation from the sale of shares of Common Stock under the Plan shall be used for general corporate purposes.

V. WITHHOLDING

The Corporation's obligation to deliver shares of Common Stock upon the exercise of any options granted under the Plan or upon the issuance or vesting of any shares issued under the Plan shall be subject to the satisfaction of all applicable income and employment tax withholding requirements.

VI. REGULATORY APPROVALS

The implementation of the Plan, the granting of any options under the Plan and the issuance of any shares of Common Stock (i) upon the exercise of any option or (ii) under the Stock Issuance Program shall be subject to the Corporation's procurement of all approvals and permits required by regulatory authorities having jurisdiction over the Plan, the options granted under it and the shares of Common Stock issued pursuant to it.

VII. NO EMPLOYMENT OR SERVICE RIGHTS

Nothing in the Plan shall confer upon the Optionee or the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Corporation (or any Parent or Subsidiary employing or retaining such person) or of the Optionee or the Participant, which rights are hereby expressly reserved by each, to terminate such person's Service at any time for any reason, with or without cause.

APPENDIX

The following definitions shall be in effect under the Plan:

A. Board shall mean the Corporation's Board of Directors.

B. Change in Control shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, unless securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction, or

(ii) a stockholder-approved sale, transfer or other disposition of all or substantially all of the Corporation's assets in liquidation or dissolution of the Corporation, or

(iii) the acquisition, directly or indirectly by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation), of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders.

In no event shall any public offering of the Corporation's securities be deemed to constitute a Change in Control.

C. Code shall mean the Internal Revenue Code of 1986, as amended.

D. Committee shall mean a committee of one (1) or more Board members appointed by the Board to exercise one or more administrative functions under the Plan.

E. Common Stock shall mean the Corporation's common stock.

F. Corporation shall mean Caribou Biosciences, Inc., a Delaware corporation, and any successor corporation to all or substantially all of the assets or voting stock of Caribou Biosciences, Inc. which shall by appropriate action adopt the Plan.

G. Disability shall mean the inability of the Optionee or Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment and shall be determined by the Plan Administrator on the basis of such medical evidence as the Plan Administrator deems warranted under the circumstances.

H. Employee shall mean an individual who is in the employ of the Corporation (or any Parent or Subsidiary), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

I. Exercise Date shall mean the date on which the Corporation shall have received written notice of the option exercise.

J. Fair Market Value per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq Global or Global Select Market, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question, as such price is reported by the National Association of Securities Dealers for that particular Stock Exchange and published in The Wall Street Journal. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the Common Stock is at the time listed on any other Stock Exchange, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question on the Stock Exchange determined by the Plan Administrator to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange and published in The Wall Street Journal. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(iii) If the Common Stock is not at the time listed on any Stock Exchange, then the Fair Market Value shall be determined by the Plan Administrator through the reasonable application of a reasonable valuation method that takes into account the applicable valuation factors set forth in the Treasury Regulations issued under Section 409A of the Code; provided, however, that with respect to an Incentive Option, such Fair Market Value shall be determined in accordance with the standards of Section 422 of the Code and the applicable Treasury Regulations thereunder.

K. Family Member means, with respect to a particular Optionee or Participant, any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law.

L. Incentive Option shall mean an option which satisfies the requirements of Code Section 422.

M. Involuntary Termination shall mean the termination of the Service of any individual which occurs by reason of:

(i) such individual's involuntary dismissal or discharge by the Corporation for reasons other than Misconduct, or

(ii) such individual's voluntary resignation following (A) a change in his or her position with the Corporation which materially reduces his or her duties and responsibilities or the level of management to which he or she reports, (B) a reduction in his or her level of compensation (including base salary, fringe benefits and target bonus under any corporate-performance based bonus or incentive programs) by more than fifteen percent (15%) or (C) a relocation of such individual's place of employment by more than fifty (50) miles, provided and only if such change, reduction or relocation is effected without the individual's consent.

N. Misconduct shall mean the commission of any act of fraud, embezzlement or dishonesty by the Optionee or Participant, any unauthorized use or disclosure by such person of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary), or any other intentional misconduct by such person adversely affecting the business or affairs of the Corporation (or any Parent or Subsidiary) in a material manner. The foregoing definition shall not in any way preclude or restrict the right of the Corporation (or any Parent or Subsidiary) to discharge or dismiss any Optionee, Participant or other person in the Service of the Corporation (or any Parent or Subsidiary) for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan, to constitute grounds for termination for Misconduct.

O. 1933 Act shall mean the Securities Act of 1933, as amended.

P. 1934 Act shall mean the Securities Exchange Act of 1934, as amended.

Q. Non-Statutory Option shall mean an option not intended to satisfy the requirements of Code Section 422.

R. Option Grant Program shall mean the option grant program in effect under the Plan.

S. Optionee shall mean any person to whom an option is granted under the Plan.

T. Parent shall mean any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

U. Participant shall mean any person who is issued shares of Common Stock under the Stock Issuance Program or to whom restricted stock units or share rights are awarded under such program.

V. Plan shall mean the Corporation's 2012 Stock Option/Stock Issuance Plan, as set forth in this document.

W. Plan Administrator shall mean either the Board or the Committee acting in its capacity as administrator of the Plan.

X. Service shall mean the performance of services for the Corporation (or any Parent or Subsidiary, whether now existing or subsequently established) by a person in the capacity of an Employee, a non-employee member of the board of directors or a consultant or independent advisor, except to the extent otherwise specifically provided in the documents evidencing the option grant or stock issuance. For purposes of the Plan, an Optionee or Participant shall be deemed to cease Service immediately upon the occurrence of the either of the following events: (i) the Optionee or Participant no longer performs services in any of the foregoing capacities for the Corporation or any Parent or Subsidiary or (ii) the entity for which the Optionee or Participant is performing such services ceases to remain a Parent or Subsidiary of the Corporation, even though the Optionee or Participant may subsequently continue to perform services for that entity. Service shall not be deemed to cease during a period of military leave, sick leave or other personal leave approved by the Corporation; provided, however, that for a leave which exceeds three (3) months, Service shall be deemed, for purposes of determining the period within which any outstanding option held by the Optionee in question may be exercised as an Incentive Option, to cease on the first day immediately following the expiration of such three (3)-month period, unless that Optionee is provided with the right to return to Service following such leave either by statute or by written contract. Except to the extent otherwise required by law or expressly authorized by the Plan Administrator or by the Corporation's written policy on leaves of absence, no Service credit shall be given for vesting purposes for any period the Optionee or Participant is on a leave of absence.

Y. Stock Exchange shall mean the American Stock Exchange, the Nasdaq Global or Global Select Market or the New York Stock Exchange.

Z. Stock Issuance Agreement shall mean the agreement entered into by the Corporation and the Participant at the time of issuance of shares of Common Stock under the Stock Issuance Program.

AA. Stock Issuance Program shall mean the stock issuance program in effect under the Plan.

BB. Subsidiary shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

CC. 10% Stockholder shall mean the owner of stock (as determined under Code Section 424(d)) possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Corporation (or any Parent or Subsidiary).

CARIBOU BIOSCIENCES, INC.

STOCK OPTION AGREEMENT

RECITALS

A. The Board has adopted the Plan for the purpose of retaining the services of selected Employees, non-employee members of the Board or the board of directors of any Parent or Subsidiary and consultants and other independent advisors in the service of the Corporation (or any Parent or Subsidiary).

B. Optionee is to render valuable services to the Corporation (or a Parent or Subsidiary), and this Agreement is executed pursuant to, and is intended to carry out the purposes of, the Plan in connection with the Corporation's grant of an option to Optionee.

C. All capitalized terms in this Agreement shall have the meaning assigned to them in the attached Appendix.

NOW, THEREFORE, it is hereby agreed as follows:

1. Grant of Option. The Corporation hereby grants to Optionee, as of the Grant Date, an option to purchase up to the number of Option Shares specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term specified in Paragraph 2 at the Exercise Price.

2. Option Term. This option shall have a term of ten (10) years measured from the Grant Date and shall accordingly expire at the close of business on the Expiration Date, unless sooner terminated in accordance with Paragraph 5 or 6.

3. Limited Transferability.

(a) This option, together with the Option Shares during the period prior to exercise, shall be neither transferable nor assignable by Optionee other than by will or the laws of inheritance following Optionee's death and may be exercised, during Optionee's lifetime, only by Optionee. However, Optionee may designate one or more Family Members as the beneficiary or beneficiaries of this option, and this option shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon Optionee's death while holding this option. Such beneficiary or beneficiaries shall take the transferred option subject to all the terms and conditions of this Agreement, including (without limitation) the limited time period during which this option may, pursuant to Paragraph 5, be exercised following Optionee's death.

(b) If this option is designated a Non-Statutory Option in the Grant Notice, then this option, together with the unexercised Option Shares, shall be subject to the same transfer restrictions as set forth in Paragraph 3(a), except that such option, together with the underlying unexercised Option Shares, may be assigned in whole or in part during the Optionee's lifetime by gift or pursuant to a domestic relations order to one or more of Optionee's Family Members or to a trust established for the exclusive benefit of Optionee and/or one or more such Family Members. The assigned portion shall be exercisable only by the person or persons who acquire a proprietary interest in the option pursuant to such assignment. The terms applicable to the assigned portion shall be the same as those in effect for this option immediately prior to such assignment.

(c) Prior to the date the Corporation first becomes subject to the reporting requirements of Section 13 or 15(d) of the 1934 Act, this option, together with the underlying unexercised Option Shares, shall not be the subject of any short position, put equivalent position (as such term is defined in Rule 16a-1(h) under the 1934 Act) or call equivalent position (as such term is defined Rule 16a-1(b) of the 1934 Act).

(d) Except as otherwise provided in Paragraph 3(a) or 3(b), until the date the Corporation first becomes subject to the reporting requirements of Section 13 or 15(d) of the 1934 Act, this option, together with the underlying unexercised Option Shares, shall not be the subject of any pledges, gifts, hypothecations or other transfers, other than pursuant to the Corporation's repurchase rights or in connection with a Change in Control in which this option, together with all other options outstanding under the Plan at such time, shall terminate and cease to be outstanding.

4. Dates of Exercise. This option shall become exercisable for the Option Shares in one or more installments as specified in the Grant Notice. As the option becomes exercisable for such installments, those installments shall accumulate, and the option shall remain exercisable for the accumulated installments until the Expiration Date or sooner termination of the option term under Paragraph 5 or 6.

5. Cessation of Service. The option term specified in Paragraph 2 shall terminate (and this option shall cease to be outstanding) prior to the Expiration Date should any of the following provisions become applicable:

(a) Should Optionee cease to remain in Service for any reason (other than death, Disability or Misconduct) while this option is outstanding, then Optionee (or any person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) shall have a period of three (3) months (commencing with the date of such cessation of Service) during which to exercise this option, but in no event shall this option be exercisable at any time after the Expiration Date.

(b) Should Optionee die while this option is outstanding, then the personal representative of Optionee's estate or the person or persons to whom the option is transferred pursuant to Optionee's will or the laws of inheritance following Optionee's death or, if applicable, the person to whom the option is transferred during Optionee's lifetime pursuant to a permitted transfer under Paragraph 3 shall have the right to exercise this option. However, if Optionee dies while holding this option and has an effective beneficiary designation in effect for this option at the time of his or her death, then the designated beneficiary or beneficiaries shall have the exclusive right to exercise this option following Optionee's death. Any such right to exercise this option shall lapse, and this option shall cease to be outstanding, upon the earlier of (i) the expiration of the twelve (12)-*month period measured from the date of Optionee's death or* (ii) the Expiration Date.

(c) Should Optionee cease Service by reason of Disability while this option is outstanding, then Optionee (or any person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) shall have a period of twelve (12) months (commencing with the date of such cessation of Service) during which to exercise this option. In no event shall this option be exercisable at any time after the Expiration Date.

> **Note**: Exercise of this option on a date later than three (3) months following cessation of Service due to Disability will result in loss of favorable Incentive Option treatment, unless such Disability constitutes Permanent Disability. In the event that Incentive Option treatment is not available, this option will be taxed as a Non-Statutory Option upon exercise.

(d) During the limited period of post-Service exercisability, this option may not be exercised in the aggregate for more than the number of Option Shares in which *Optionee is, at the time of Optionee's cess*ation of Service, vested pursuant to the Vesting Schedule specified in the Grant Notice or the special vesting acceleration provisions of Paragraph 6. No additional Option Shares shall vest, whether pursuant to the normal Vesting Schedule specified in the Grant Notice or the special vesting acceleration provisions of *Paragraph 6, following Optionee's cessation of Service, except to the extent (if any) specifically* authorized by the Plan Administrator pursuant to an express written agreement with Optionee. Upon the expiration of such limited exercise period or (if earlier) upon the Expiration Date, this option shall terminate and cease to be outstanding for any Option Shares for which the option has not been exercised.

(e) *Should Optionee's Service be terminate*d for Misconduct or should Optionee otherwise engage in Misconduct while this option is outstanding, then this option shall terminate immediately and cease to remain outstanding.

6. Change in Control.

(a) *Should a Change in Control occur during the Optionee's pe*riod of Service, then the Option Shares at the time subject to this option but not otherwise vested shall automatically vest in full so that this option shall, immediately prior to the effective date of the Change in Control, become exercisable for all of the Option Shares as fully vested shares and may be exercised for any or all of those Option Shares as vested shares. However, the Option Shares shall ***not*** vest on such an accelerated basis if and to the extent: (i) this option is assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect *pursuant to the terms of the Change in Control transaction and the Corporation's repurchase* rights with respect to the unvested Option Shares purchasable under this option are assigned to such successor corporation (or parent thereof) or otherwise continued in effect or (ii) this option is to be replaced with a cash retention program of the successor corporation which preserves the spread existing on the unvested Option Shares at the time of the Change in Control (the excess of the Fair Market Value of those Option Shares over the Exercise Price payable for such shares) and provides for subsequent payout of that spread in accordance with the same Vesting Schedule applicable to those unvested Option Shares as set forth in the Grant Notice or (iii) such accelerated vesting is otherwise precluded pursuant to the provisions of Paragraph 5(d) above. Notwithstanding the foregoing, no such cash retention program shall be established for this option (or any other option granted to Optionee under the Plan) to the extent such program would otherwise be deemed to constitute a deferred compensation arrangement subject to the requirements of Code Section 409A and the Treasury Regulations thereunder.

(b) Immediately following the Change in Control, this option shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction.

(c) If this option is assumed in connection with a Change in Control or otherwise continued in effect, then this option shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control, and appropriate adjustments shall also be made to the Exercise Price, provided the aggregate Exercise Price shall remain the same. To the extent that the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption or continuation of this option, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control.

(d) This Agreement shall not in any way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

7. Adjustment in Option Shares. In the event of any of the following transactions affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration: any stock split, stock dividend, spin-off transaction, extraordinary distribution (whether in cash, securities or other property), recapitalization, combination of shares, exchange of shares or other similar transaction affecting the Common Stock without the Corporation's receipt of consideration or in the event of a substantial reduction to the value of the outstanding shares of Common Stock as a result of a spin-off transaction or extraordinary distribution, then equitable adjustments shall be made to (i) the total number and/or class of securities subject to this option and (ii) the Exercise Price. The adjustments shall be made by the Plan Administrator in such manner as the Plan Administrator deems appropriate in order to reflect such change, and those adjustments shall be final, binding and conclusive.

8. Stockholder Rights. The holder of this option shall not have any stockholder rights with respect to the Option Shares until such person shall have exercised the option, paid the Exercise Price and become the record holder of the purchased shares.

9. Manner of Exercising Option.

(a) In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or any other person or persons exercising the option) must take the following actions:

(i) Execute and deliver to the Corporation a Purchase Agreement for the Option Shares for which the option is exercised.

(ii) Pay the aggregate Exercise Price for the purchased shares in one or more of the following forms:

(A) cash or check made payable to the Corporation; or

(B) a promissory note payable to the Corporation, but only to the extent authorized by the Plan Administrator in accordance with Paragraph 14.

Should the Common Stock be registered under Section 12 of the 1934 Act at the time the option is exercised, then the Exercise Price may also be paid as follows:

(C) in shares of Common Stock valued at Fair Market Value on the Exercise Date and held by Optionee (or any other person or persons exercising the option) for the period (if any) necessary to avoid a charge to the Corporation's earnings for financial reporting purposes; or

(D) to the extent the option is exercised for vested Option Shares, through a special sale and remittance procedure pursuant to which Optionee (or any other person or persons exercising the option) shall concurrently provide irrevocable instructions (a) to a brokerage firm (reasonably satisfactory to the Corporation for purposes of administering such procedure in compliance with any applicable pre-clearance or pre-notification requirements) to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate Exercise Price payable for the purchased shares plus all applicable income and employment taxes required to be withheld by the Corporation by reason of such exercise and (b) to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm on such settlement date in order to complete the sale.

Except to the extent the sale and remittance procedure is utilized in connection with the option exercise, payment of the Exercise Price must accompany the Purchase Agreement delivered to the Corporation in connection with the option exercise.

(iii) Furnish to the Corporation appropriate documentation that the person or persons exercising the option (if other than Optionee) have the right to exercise this option.

(iv) Execute and deliver to the Corporation such written representations as may be requested by the Corporation in order for it to comply with the applicable requirements of applicable securities laws.

(v) Make appropriate arrangements with the Corporation (or Parent or Subsidiary employing or retaining Optionee) for the satisfaction of all applicable income and employment tax withholding requirements applicable to the option exercise.

(b) As soon as practical after the Exercise Date, the Corporation shall issue to or on behalf of Optionee (or any other person or persons exercising this option) a certificate for the purchased Option Shares, with the appropriate legends affixed thereto.

(c) In no event may this option be exercised for any fractional shares.

10. <u>REPURCHASE RIGHTS.</u> ALL OPTION SHARES ACQUIRED UPON THE EXERCISE OF THIS OPTION SHALL BE SUBJECT TO CERTAIN RIGHTS OF THE CORPORATION AND ITS ASSIGNS TO REPURCHASE THOSE SHARES IN ACCORDANCE WITH THE TERMS SPECIFIED IN THE PURCHASE AGREEMENT.

11. Compliance with Laws and Regulations.

(a) The exercise of this option and the issuance of the Option Shares upon such exercise shall be subject to compliance by the Corporation and Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange on which the Common Stock may be listed for trading at the time of such exercise and issuance.

(b) The inability of the Corporation to obtain approval from any regulatory body having authority deemed by the Corporation to be necessary to the lawful issuance and sale of any Common Stock pursuant to this option shall relieve the Corporation of any liability with respect to the non-issuance or sale of the Common Stock as to which such approval shall not have been obtained. The Corporation, however, shall use its best efforts to obtain all such approvals.

12. Successors and Assigns. Except to the extent otherwise provided in Paragraphs 3 and 6, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Corporation and its successors and assigns and Optionee, Optionee's assigns and the legal representatives, heirs and legatees of Optionee's estate.

13. Notices. Any notice required to be given or delivered to the Corporation under the terms of this Agreement shall be in writing and addressed to the Corporation at its principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

14. Financing. The Plan Administrator may, in its absolute discretion and without any obligation to do so, permit Optionee to pay the Exercise Price for the purchased Option Shares by delivering a full-recourse promissory note bearing interest at a market rate and secured by those Option Shares. The payment schedule in effect for any such promissory note shall be established by the Plan Administrator in its sole discretion.

15. Construction. This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the terms of the Plan. All decisions of the Plan Administrator with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in this option.

16. Governing Law. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of California without resort to that State's conflict-of-laws rules.

17. Stockholder Approval. If the Option Shares covered by this Agreement exceed, as of the Grant Date, the number of shares of Common Stock which may be issued under the Plan as last approved by the stockholders, then this option shall be void with respect to such excess shares, unless stockholder approval of an amendment sufficiently increasing the number of shares of Common Stock issuable under the Plan is obtained in accordance with the provisions of the Plan.

18. Additional Terms Applicable to an Incentive Option. In the event this option is designated an Incentive Option in the Grant Notice, the following terms and conditions shall also apply to the grant:

(a) This option shall cease to qualify for favorable tax treatment as an Incentive Option if (and to the extent) this option is exercised for one or more Option Shares: (i) more than three (3) months after the date Optionee ceases to be an Employee for any reason other than death or Permanent Disability or (ii) more than twelve (12) months after the date Optionee ceases to be an Employee by reason of Permanent Disability.

(b) This option shall not become exercisable in the calendar year in which granted if (and to the extent) the aggregate Fair Market Value (determined at the Grant Date) of the Common Stock for which this option would otherwise first become exercisable in such calendar year would, when added to the aggregate value (determined as of the respective date or dates of grant) of the Common Stock and any other securities for which one or more other Incentive Options granted to Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Corporation or any Parent or Subsidiary) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate. To the extent the exercisability of this option is deferred by reason of the foregoing limitation, the deferred portion shall become exercisable in the first calendar year or years thereafter in which the One Hundred Thousand Dollar ($100,000) limitation of this Paragraph 18(b) would not be contravened, but such deferral shall in all events end immediately prior to the effective date of a Change in Control in which this option is not to be assumed or otherwise continued in effect, whereupon the option shall become immediately exercisable as a Non-Statutory Option for the deferred portion of the Option Shares.

(c) Should Optionee hold, in addition to this option, one or more other options to purchase Common Stock which become exercisable for the first time in the same calendar year as this option, then for purposes of the foregoing limitations on the exercisability of such options as Incentive Options, this option and each of those other options shall be deemed to become first exercisable in that calendar year on the basis of the chronological order in which they were granted, except to the extent otherwise provided under applicable law or regulation.

APPENDIX

The following definitions shall be in effect under the Agreement:

A. **Agreement** shall mean this Stock Option Agreement.

B. **Board** *shall mean the Corporation's Board of Directors.*

C. **Change in Control** shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved *by the Corporation's stockholders*, unless securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the *Corporation's outstanding voting securities immediately* prior to such transaction, or

(ii) a stockholder-approved sale, transfer or other disposition of *all or substantially all of the Corporation's assets in liquidation or dissolution of* the Corporation, or

(iii) the acquisition, directly or indirectly by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation), of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders.

In no event shall any public offering of the Corporation's securities be deemed to constitute a Change in Control.

D. **Code** shall mean the Internal Revenue Code of 1986, as amended.

E. **Common Stock** *shall mean the Corporation's common stock.*

F. **Corporation** shall mean Caribou Biosciences, Inc., a Delaware corporation, and any successor corporation to all or substantially all of the assets or voting stock of Caribou Biosciences, Inc. which shall by appropriate action assume this option.

G. **Disability** shall mean the inability of Optionee to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment and shall be determined by the Plan Administrator on the basis of such medical evidence as the Plan Administrator deems warranted under the circumstances. Disability shall be deemed to constitute **Permanent Disability** in the event that such Disability is expected to result in death or has lasted or can be expected to last for a continuous period of twelve (12) months or more.

H. Employee shall mean an individual who is in the employ of the Corporation (or any Parent or Subsidiary), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

I. Exercise Date shall mean the date on which the option shall have been exercised in accordance with Paragraph 9 of the Agreement.

J. Exercise Price shall mean the exercise price payable per Option Share as specified in the Grant Notice.

K. Expiration Date shall mean the date on which the option expires as specified in the Grant Notice.

L. Fair Market Value per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq Global or Global Select Market, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question, as the price is reported by the National Association of Securities Dealers for that particular Stock Exchange and published in The Wall Street Journal. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the Common Stock is at the time listed on any other Stock Exchange, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question on the Stock Exchange determined by the Plan Administrator to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange and published in The Wall Street Journal. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(iii) If the Common Stock is not at the time listed on any Stock Exchange, then the Fair Market Value shall be determined by the Plan Administrator through the reasonable application of a reasonable valuation method that takes into account the applicable valuation factors set forth in the Treasury Regulations issued under Section 409A of the Code; provided, however, that if the option is designated Incentive Option in the Grant Notice, then such Fair Market Value shall be determined in accordance with the standards of Section 422 and the applicable Treasury Regulations thereunder.

M. Family Member shall mean any of the following members of the Optionee's family: any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law.

N. Grant Date shall mean the date of grant of the option as specified in the Grant Notice.

O. Grant Notice shall mean the Notice of Grant of Stock Option accompanying the Agreement, pursuant to which Optionee has been informed of the basic terms of the option evidenced hereby.

P. Incentive Option shall mean an option which satisfies the requirements of Code Section 422.

Q. Misconduct shall mean the commission of any act of fraud, embezzlement or dishonesty by Optionee, any unauthorized use or disclosure by Optionee of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary), or any other intentional misconduct by Optionee adversely affecting the business or affairs of the Corporation (or any Parent or Subsidiary) in a material manner. The foregoing definition shall not in any way preclude or restrict the right of the Corporation (or any Parent or Subsidiary) to discharge or dismiss Optionee or any other person in the Service of the Corporation (or any Parent or Subsidiary) for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan or this Agreement, to constitute grounds for termination for Misconduct.

R. 1934 Act shall mean the Securities Exchange Act of 1934, as amended.

S. Non-Statutory Option shall mean an option not intended to satisfy the requirements of Code Section 422.

T. Option Shares shall mean the number of shares of Common Stock subject to the option.

U. Optionee shall mean the person to whom the option is granted as specified in the Grant Notice.

V. Parent shall mean any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

W. Plan shall mean the Corporation's 2012 Stock Option/Stock Issuance Plan.

X. Plan Administrator shall mean either the Board or a committee of the Board acting in its capacity as administrator of the Plan.

Y. Purchase Agreement shall mean the stock purchase agreement in substantially the form of Exhibit C to the Grant Notice.

Z. Service shall mean Optionee's performance of services for the Corporation (or any Parent or Subsidiary, whether now existing or subsequently established) in the capacity of an Employee, a non-employee member of the board of directors or a consultant or independent advisor. For purposes of this Agreement, Optionee shall be deemed to cease Service immediately upon the occurrence of either of the following events: (i) Optionee no longer performs services in any of the foregoing capacities for the Corporation or any Parent or Subsidiary or (ii) the entity for which Optionee is performing such services ceases to remain a Parent or Subsidiary of the Corporation, even though Optionee may subsequently continue to perform active services for that entity. Service shall not be deemed to cease during a period of military leave, sick leave or other personal leave approved by the Corporation; provided, however, that should such leave of absence exceed three (3) months, then for purposes of determining the period within which the Option (if designated as an Incentive Option in the Grant Notice) may be exercised as such an Incentive Option under the federal tax laws, Optionee's Service shall be deemed to cease on the first day immediately following the expiration of such three (3)-month period, unless Optionee is provided with the right to return to Service following such leave either by statute or by written contract. Except to the extent otherwise required by law or expressly authorized by the Plan Administrator or by the Corporation's written policy on leaves of absence, no Service credit shall be given for vesting purposes for any period Optionee is on a leave of absence.

AA. **Stock Exchange** shall mean the American Stock Exchange, the Nasdaq Global or Global Select Market or the New York Stock Exchange.

BB. **Subsidiary** shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

CC. **Vesting Schedule** shall mean the vesting schedule specified in the Grant Notice pursuant to which Optionee is to vest in the Option Shares in a series of installments over his or her period of Service.

Exhibit 10.48

PROMISSORY NOTE

$1,100,000.00

Berkeley, California
November 27, 2018

For value received, the undersigned promises to pay Caribou Biosciences, Inc., a Delaware corporation (the "Company"), having its principal office at 2929 7th Street, Suite 105, Berkeley, CA, 94710, the principal sum of $1,100,000.00 with interest from the date hereof at a rate of 3.04% compounded annually, on the unpaid balance of such principal sum.

The entire unpaid principal balance of this Promissory Note (the "Note"), together with the accrued and unpaid interest thereon, shall become due and payable in one lump sum on November 27, 2023, provided, the entire unpaid principal balance of this Note, together with the accrued and unpaid interest thereon, shall become due and payable immediately upon the happening of any of the following events: (i) any termination of the undersigned's employment or service with the Company or any parent, subsidiary, affiliate or successor of the Company (transfers amongst such entities will not be considered a termination of employment for purposes of this Note); (ii) the later of (a) the date that is 6 months following the effective date of the Company's initial public offering of its securities on an established securities market or exchange, or (b) the date that is 10 business days following any lock-Up period for the sale of the undersigned's shares; (iii) the consummation of a Change in Control (as defined in the Company's 2013 Equity Incentive Plan (as amended May 12, 2016)); (iv) the day immediately prior to a liquidation, dissolution or winding up of the Company, whether voluntarily or involuntarily; (v) the day prior to such date on which the loan represented by this Note would be in violation of the provisions of Sarbanes-Oxley or would otherwise violate any other applicable law; (vi) the commission of any act of bankruptcy by the undersigned; (vii) the execution by the undersigned of a general assignment for the benefit of creditors; (viii) the filing by or against the undersigned of a petition in bankruptcy or any petition for relief under the federal bankruptcy act; or (ix) the appointment of a receiver or trustee to take possession of the property or assets of the undersigned.

All payments of principal and interest on this Note shall be made without offset or deduction in lawful tender of the United States and shall be applied first to the payment of all accrued and unpaid interest and then to the payment of principal. Prepayment of the principal balance of this Note, together with all accrued and unpaid interest, may be made in whole or in part at any time without penalty.

This Note is a 50% recourse promissory note which means that the Company shall have full recourse against any assets of the undersigned up to 50% of the principal and interest accrued with respect to such principal under this Note (it being understood that the undersigned shall be personally obligated for the recourse portion of the Note and related payments of principal and interest hereunder). This Note is secured by a pledge of certain shares of the Company's Common Stock and is subject to the terms of a Pledge and Security Agreement between the undersigned and the Company of even date herewith. Each payment of principal and/or interest made by or on behalf of the undersigned from any source other than from the collateral securing this Note shall be applied first and entirely to the payment of any sums due under the recourse portion of this Note (and related payment of interest on the recourse portion of this Note), and then to any other amounts due under this Note.

The terms and conditions of this Note shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Notwithstanding the foregoing, neither the Company nor the undersigned may assign, pledge or otherwise transfer this Note without the prior written consent of the other party.

This Note, and all acts and transactions pursuant hereto, and the rights and obligations of the parties hereto, shall be governed, construed and interpreted in accordance with the laws of California, without giving effect to principles of conflicts of law thereof. The undersigned agrees to pay on demand all the losses, costs, and expenses (including, without limitation, attorneys' fees and disbursements) which the Company incurs in connection with the enforcement or attempted enforcement of this Note, or the protection or preservation of the Company's rights under this Note, whether by judicial proceedings or otherwise. The undersigned hereby waives presentment, demand for payment, notice of dishonor, default or delinquency, notice of acceleration, notice of protest and non-payment, notice of costs, expenses or losses and interest thereon, notice of interest on interest, and diligence in taking any action to collect any sums owing under this Note or in proceeding against any of the rights or interests in or to properties securing payment of this Note.

/s/ Rachel E. Haurwitz, Ph.D.
Rachel E. Haurwitz, Ph.D.

Exhibit 10.49

PLEDGE AND SECURITY AGREEMENT

This Pledge and Security Agreement (the "Agreement") is entered into as of November 27, 2018 by and between Caribou Biosciences, Inc., a Delaware corporation (the "Company"), and Rachel E. Haurwitz, Ph.D. ("Borrower").

RECITALS

A. The Company has loaned to Borrower $1,100,000.00 as evidenced by that certain Promissory Note dated as of November 27, 2018 (the "Note").

B. In order to secure payment of the Note, Borrower hereby pledges and grants a security interest in 225,410 shares of the Company's Common Stock standing in Borrower's name on the books of the Company and represented by Certificate No. 02 (the "Shares").

AGREEMENT

In consideration of the Company's acceptance of the Note in payment of the purchase price of the Shares, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Borrower shall deliver to the Secretary of the Company, her designee (hereinafter referred to as the "Pledge Holder"), all certificates representing the Shares, together with an Assignment Separate from Certificate in the form attached to this Agreement as Attachment A executed by Borrower and by Borrower's spouse (if required for transfer), in blank, for use in transferring all or a portion of the Shares to the Company if, as and when required pursuant to this Agreement. In addition, if Borrower is married, Borrower's spouse shall execute the signature page attached to this Agreement.

2. As security for the payment of the Note and any renewal, extension or modification of the Note, Borrower hereby grants to the Company a security interest in and pledges with and delivers to the Company her Shares (sometimes referred to herein as the "Collateral").

3. In the event that Borrower prepays a portion of the Note, in accordance with the provisions thereof, Borrower intends, unless written notice to the contrary is delivered to the Pledge Holder, that the Shares represented by the portion of the Note so repaid, including accrued interest thereon, shall continue to be so held by the Pledge Holder, to serve as independent collateral for the outstanding portion of the Note.

4. In the event of any foreclosure of the security interest created by this Agreement, the Company may sell the Shares at a private sale or may repurchase the Shares itself. The parties agree that, prior to the establishment of a public market for the Shares, the securities laws affecting sale of the Shares may make a public sale of the Shares commercially unreasonable. The parties further agree that the repurchasing of such Shares by the Company, or by any person to whom the Company may have assigned its rights under this Agreement, is commercially reasonable if made at a price determined by the Company's Board of Directors in its discretion, fairly exercised, representing what would be the fair market value of the Shares reduced by any limitation on transferability, whether due to the size of the block of shares or the restrictions of applicable securities laws.

5. In the event of default in payment when due of any indebtedness under the Note, the Company may elect then, or at any time thereafter, to exercise all rights available to a secured party under applicable law including the right to sell the Collateral at a private or public sale or repurchase the Shares as provided above. The proceeds of any sale shall be applied in the following order:

(a) To the extent necessary, proceeds shall be used to pay all reasonable expenses of the Company in enforcing this Agreement and the Note, including, without limitation, reasonable attorneys' fees and legal expenses incurred by the Company.

(b) To the extent necessary, proceeds shall be used to satisfy any remaining indebtedness under Borrower's Note, applied first and entirely to the payment of any sums due under the non-recourse portion of the Note (and related payment of interest on the non-recourse portion of the Note), and then to any other amounts due under the Note.

(c) Any remaining proceeds shall be delivered to Borrower.

6. Upon full payment by Borrower of all amounts due under the Note, Pledge Holder shall deliver to Borrower all Shares in Pledge Holder's possession belonging to Borrower, and Pledge Holder shall thereupon be discharged of all further obligations under this Agreement; provided, however, that Pledge Holder shall nevertheless retain the Shares as escrow agent if at the time of full payment by Borrower said Shares are still subject to a repurchase option in favor of the Company.

The parties have executed this Pledge and Security Agreement as of the date first set forth above.

Rachel E. Haurwitz, Ph.D

/s/ Rachel E. Haurwitz, Ph.D.
(Signature)

Caribou Biosciences, Inc.

/s/ Barbara G. McClung
(Signature)

Barbara G. McClung
Chief Legal Officer & Corporate Secretary

ATTACHMENT A

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED and pursuant to that certain Pledge and Security Agreement between the undersigned ("Borrower") and Caribou Biosciences, Inc., a Delaware corporation (the "Company"), dated November 27, 2018 (the "Agreement"), Borrower hereby sells, assigns and transfers unto the Company _____ shares of the Company's Common Stock, standing in Borrower's name on the books of the Company and represented by Certificate No._____, and does hereby irrevocably constitute and appoint _____ to transfer said stock to the Company with full power of substitution in the premises. THIS ASSIGNMENT MAY ONLY BE USED AS AUTHORIZED BY THE AGREEMENT.

Dated: _____

_____
Rachel E. Haurwitz, Ph.D.

_____
Spouse of Borrower (if applicable)

Instruction: Please do not fill in any blanks other than the signature line. The purpose of this assignment is to perfect the security interest of the Company pursuant to the Agreement.

Exhibit 10.50

CARIBOU BIOSCIENCES, INC.

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this "***Agreement***") is dated as of , 20 , and is between Caribou Biosciences, Inc., a Delaware corporation (the "***Company***"), and ("***Indemnitee***").

RECITALS

A. Indemnitee's service to the Company substantially benefits the Company.

B. Individuals are reluctant to serve as directors or officers of corporations or in certain other capacities unless they are provided with adequate protection through insurance or indemnification against the risks of claims and actions against them arising out of such service.

C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and any insurance as adequate under the present circumstances, and Indemnitee may not be willing to serve as a director or officer without additional protection.

D. In order to induce Indemnitee to continue to provide services to the Company, it is reasonable, prudent and necessary for the Company to contractually obligate itself to indemnify, and to advance expenses on behalf of, Indemnitee as permitted by applicable law.

E. This Agreement is a supplement to and in furtherance of the indemnification provided in the Company's certificate of incorporation and bylaws, and any resolutions adopted pursuant thereto, and this Agreement shall not be deemed a substitute therefor, nor shall this Agreement be deemed to limit, diminish or abrogate any rights of Indemnitee thereunder.

The parties therefore agree as follows:

1. **Definitions.**

(a) A "***Change in Control***" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) *Acquisition of Stock by Third Party.* Any Person (as defined below) is or becomes the Beneficial Owner (as defined below), directly or indirectly, of securities of the Company representing fifteen percent (15%) or more of the combined voting power of the Company's then outstanding securities;

(ii) *Change in Board Composition.* During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Company's board of directors, and any new directors (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 1(a)(i), 1(a)(iii) or 1(a)(iv)) whose election by the board of directors or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Company's board of directors;

(iii) *Corporate Transactions.* The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving entity;

(iv) *Liquidation.* The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; and

(v) *Other Events.* Any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or in response to any similar item on any similar schedule or form) promulgated under the Securities Exchange Act of 1934, as amended, whether or not the Company is then subject to such reporting requirement.

For purposes of this Section 1(a), the following terms shall have the following meanings:

(1) "***Person***" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended; *provided, however,* that "***Person***" shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(2) "***Beneficial Owner***" shall have the meaning given to such term in Rule 13d-3 under the Securities Exchange Act of 1934, as amended; *provided, however,* that "***Beneficial Owner***" shall exclude any Person otherwise becoming a Beneficial Owner by reason of (i) the stockholders of the Company approving a merger of the Company with another entity or (ii) the Company's board of directors approving a sale of securities by the Company to such Person.

(b) "***Corporate Status***" describes the status of a person who is or was a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise.

(c) "***DGCL***" means the General Corporation Law of the State of Delaware.

(d) "***Disinterested Director***" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(e) "***Enterprise***" means the Company and any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary.

(f) "***Expenses***" include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees and costs of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding. Expenses also

include (i) Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond or other appeal bond or their equivalent, and (ii) for purposes of Section 12(d), Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(g) "***Independent Counsel***" means a law firm, or a partner or member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company or Indemnitee in any matter material to either such party (other than as Independent Counsel with respect to matters concerning Indemnitee under this Agreement, or other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "***Independent Counsel***" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

(h) "***Proceeding***" means any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, including any appeal therefrom, in which Indemnitee was, is or will be involved as a party, a potential party, a non-party witness or otherwise by reason of (i) the fact that Indemnitee is or was a director or officer of the Company, (ii) any action taken by Indemnitee or any action or inaction on Indemnitee's part while acting as a director or officer of the Company, or (iii) the fact that he or she is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification or advancement of expenses can be provided under this Agreement.

(i) Reference to "***other enterprises***" shall include employee benefit plans; references to "***fines***" shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to "***serving at the request of the Company***" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "***not opposed to the best interests of the Company***" as referred to in this Agreement.

2. **Indemnity in Third-Party Proceedings.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 2 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 2, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

3. **Indemnity in Proceedings by or in the Right of the Company.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged by a court of competent jurisdiction to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery or any court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

4. **Indemnification for Expenses of a Party Who is Wholly or Partly Successful.** To the extent that Indemnitee is a party to or a participant in and is successful (on the merits or otherwise) in defense of any Proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. To the extent permitted by applicable law, if Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, in defense of one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with (a) each successfully resolved claim, issue or matter and (b) any claim, issue or matter related to any such successfully resolved claim, issuer or matter. For purposes of this section, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

5. **Indemnification for Expenses of a Witness.** To the extent that Indemnitee is, by reason of his or her Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified to the extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

6. **Additional Indemnification.**

(a) Notwithstanding any limitation in Sections 2, 3 or 4, the Company shall indemnify Indemnitee to the fullest extent permitted by applicable law if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding (including a Proceeding by or in the right of the Company to procure a judgment in its favor) against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with the Proceeding or any claim, issue or matter therein.

(b) For purposes of Section 6(a), the meaning of the phrase "***to the fullest extent permitted by applicable law***" shall include, but not be limited to:

(i) the fullest extent permitted by the provision of the DGCL that authorizes or contemplates additional indemnification by agreement, or the corresponding provision of any amendment to or replacement of the DGCL; and

(ii) the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.

7. **Exclusions.** Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any Proceeding (or any part of any Proceeding):

(a) for which payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of federal, state or local statutory law or common law, if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(c) for any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Securities Exchange Act of 1934, as amended (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "***Sarbanes-Oxley Act***"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(d) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Company's board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise authorized in Section 12(d) or (iv) otherwise required by applicable law; or

(e) if prohibited by applicable law.

8. **Advances of Expenses.** The Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made as soon as reasonably practicable, but in any event no later than 60 days, after the receipt by the Company of a written statement or statements requesting such advances from time to time (which shall include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditure made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice). Advances shall be unsecured and interest free and made without regard to Indemnitee's ability to repay such advances. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined that Indemnitee is not entitled to be indemnified by the Company. This Section 8 shall not apply to the extent advancement is prohibited by law and shall not apply to any Proceeding for which indemnity is not permitted under this Agreement, but shall apply to any Proceeding referenced in Section 7(b) or 7(c) prior to a determination that Indemnitee is not entitled to be indemnified by the Company.

9. **Procedures for Notification and Defense of Claim.**

(a) Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses as soon as reasonably practicable following the receipt by Indemnitee of notice thereof. The written notification to the Company shall include, in reasonable detail, a description of the nature of the Proceeding and the facts underlying the Proceeding. The failure by Indemnitee to notify the Company will not relieve the Company from any liability which it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights.

(b) If, at the time of the receipt of a notice of a Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of the Proceeding to the insurers in accordance with the procedures set forth in the applicable policies. The Company shall thereafter take all commercially-reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(c) In the event the Company may be obligated to make any indemnity in connection with a Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, upon the delivery to Indemnitee of written notice of its election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee for any fees or expenses of counsel subsequently incurred by Indemnitee with respect to the same Proceeding. Notwithstanding the Company's assumption of the defense of any such Proceeding, the Company shall be obligated to pay the fees and expenses of Indemnitee's counsel to the extent (i) the employment of counsel by Indemnitee is authorized by the Company, (ii) counsel for the Company or Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense such that Indemnitee needs to be separately represented, (iii) the fees and expenses are non-duplicative and reasonably incurred in connection with Indemnitee's role in the Proceeding despite the Company's assumption of the defense, (iv) the Company is not financially or legally able to perform its indemnification obligations or (v) the Company shall not have retained, or shall not continue to retain, such counsel to defend such Proceeding. The Company shall have the right to conduct such defense as it sees fit in its sole discretion. Regardless of any provision in this Agreement, Indemnitee shall have the right to employ counsel in any Proceeding at Indemnitee's personal expense. The Company shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Company.

(d) Indemnitee shall give the Company such information and cooperation in connection with the Proceeding as may be reasonably appropriate.

(e) Indemnitee shall not enter into any settlement in connection with a Proceeding (or any part thereof) without ten days prior written notice to the Company.

(f) The Company shall not settle any Proceeding (or any part thereof) without Indemnitee's prior written consent, which shall not be unreasonably withheld.

10. **Procedures upon Application for Indemnification.**

(a) To obtain indemnification, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and as is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Proceeding. The Company shall, as soon as reasonably practicable after receipt of such a request for indemnification, advise the board of directors that Indemnitee has requested indemnification. Any delay in providing the request will not relieve the Company from its obligations under this Agreement, except to the extent such failure is prejudicial.

(b) Upon written request by Indemnitee for indemnification pursuant to Section 10(a), a determination, if required by applicable law, with respect to Indemnitee's entitlement thereto shall be made in

the specific case (i) if a Change in Control shall have occurred, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (ii) if a Change in Control shall not have occurred, (A) by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (B) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (C) if there are no such Disinterested Directors or, if such Disinterested Directors so direct, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (D) if so directed by the Company's board of directors, by the stockholders of the Company. If it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten days after such determination. Indemnitee shall cooperate with the person, persons or entity making the determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company, to the extent permitted by applicable law.

(c) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(b), the Independent Counsel shall be selected as provided in this Section 10(c). If a Change in Control shall not have occurred, the Independent Counsel shall be selected by the Company's board of directors, and the Company shall give written notice to Indemnitee advising him or her of the identity of the Independent Counsel so selected. If a Change in Control shall have occurred, the Independent Counsel shall be selected by Indemnitee (unless Indemnitee shall request that such selection be made by the Company's board of directors, in which event the preceding sentence shall apply), and Indemnitee shall give written notice to the Company advising it of the identity of the Independent Counsel so selected. In either event, Indemnitee or the Company, as the case may be, may, within ten days after such written notice of selection shall have been given, deliver to the Company or to Indemnitee, as the case may be, a written objection to such selection; *provided*, *however*, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 1 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 10(a) hereof and (ii) the final disposition of the Proceeding, the parties have not agreed upon an Independent Counsel, either the Company or Indemnitee may petition a court of competent jurisdiction for resolution of any objection which shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 10(b) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, the Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

(d) The Company agrees to pay the reasonable fees and expenses of any Independent Counsel and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

11. **Presumptions and Effect of Certain Proceedings.**

(a) In making a determination with respect to entitlement to indemnification hereunder, the person, persons or entity making such determination shall, to the fullest extent not prohibited by law, presume that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 10(a) of this Agreement, and the Company shall, to the fullest extent not prohibited by law, have the burden of proof to overcome that presumption in connection with the making by such person, persons or entity of any determination contrary to that presumption.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith to the extent Indemnitee relied in good faith on (i) the records or books of account of the Enterprise, including financial statements, (ii) information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, (iii) the advice of legal counsel for the Enterprise or its board of directors or counsel selected by any committee of the board of directors or (iv) information or records given or reports made to the Enterprise by an independent certified public accountant, an appraiser, investment banker or other expert selected with reasonable care by the Enterprise or its board of directors or any committee of the board of directors. The provisions of this Section 11(c) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement.

(d) Neither the knowledge, actions nor failure to act of any other director, officer, agent or employee of the Enterprise shall be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

12. **Remedies of Indemnitee.**

(a) Subject to Section 12(e), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 or 12(d) of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10 of this Agreement within 90 days after the later of the receipt by the Company of the request for indemnification or the final disposition of the Proceeding, (iv) payment of indemnification pursuant to this Agreement is not made (A) within ten days after a determination has been made that Indemnitee is entitled to indemnification or (B) with respect to indemnification pursuant to Sections 4, 5 and 12(d) of this Agreement, within 30 days after receipt by the Company of a written request therefor, or (v) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of Expenses. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration with respect to his or her entitlement to such indemnification or advancement of Expenses, to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. The Company shall not oppose Indemnitee’s right to seek any such adjudication or award in arbitration in accordance with this Agreement.

(b) Neither (i) the failure of the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders that Indemnitee has not met the applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has or has not met the applicable standard of conduct. In the event that a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a *de novo* trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall, to the fullest extent not prohibited by law, have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.

(c) To the fullest extent not prohibited by law, the Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement. If a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statements not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) To the extent not prohibited by law, the Company shall indemnify Indemnitee against all Expenses that are incurred by Indemnitee in connection with any action for indemnification or advancement of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company to the extent Indemnitee is successful in such action, and, if requested by Indemnitee, shall (as soon as reasonably practicable, but in any event no later than 60 days, after receipt by the Company of a written request therefor) advance such Expenses to Indemnitee, subject to the provisions of Section 8.

(e) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification shall be required to be made prior to the final disposition of the Proceeding.

13. **Contribution.** To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amounts incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid or to be paid in settlement, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the events and transactions giving rise to such Proceeding; and (ii) the relative fault of Indemnitee and the Company (and its other directors, officers, employees and agents) in connection with such events and transactions.

14. **Non-exclusivity.** The rights of indemnification and to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Company's certificate of incorporation or bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than

would be afforded currently under the Company's certificate of incorporation and bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change, subject to the restrictions expressly set forth herein or therein. Except as expressly set forth herein, no right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. Except as expressly set forth herein, the assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

15. **No Duplication of Payments.** The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received payment for such amounts under any insurance policy, contract, agreement or otherwise.

16. **Insurance.** To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, trustees, general partners, managing members, officers, employees, agents or fiduciaries of the Company or any other Enterprise, Indemnitee shall be covered by such policy or policies to the same extent as the most favorably-insured persons under such policy or policies in a comparable position.

17. **Subrogation.** In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

18. **Services to the Company.** Indemnitee agrees to serve as a director or officer of the Company or, at the request of the Company, as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of another Enterprise, for so long as Indemnitee is duly elected or appointed or until Indemnitee tenders his or her resignation or is removed from such position. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee. Indemnitee specifically acknowledges that any employment with the Company (or any of its subsidiaries or any Enterprise) is at will, and Indemnitee may be discharged at any time for any reason, with or without cause, with or without notice, except as may be otherwise expressly provided in any executed, written employment contract between Indemnitee and the Company (or any of its subsidiaries or any Enterprise), any existing formal severance policies adopted by the Company's board of directors or, with respect to service as a director or officer of the Company, the Company's certificate of incorporation or bylaws or the DGCL. No such document shall be subject to any oral modification thereof.

19. **Duration.** This Agreement shall continue until and terminate upon the later of (a) ten years after the date that Indemnitee shall have ceased to serve as a director or officer of the Company or as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of any other Enterprise, as applicable; or (b) one year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto.

20. **Successors.** This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company, and shall inure to the benefit of Indemnitee and Indemnitee's heirs, executors and administrators. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, by written agreement, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

21. **Severability.** Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order or other applicable law, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (ii) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (iii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

22. **Enforcement.** The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.

23. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; *provided*, *however*, that this Agreement is a supplement to and in furtherance of the Company's certificate of incorporation and bylaws and applicable law.

24. **Modification and Waiver.** No supplement, modification or amendment to this Agreement shall be binding unless executed in writing by the parties hereto. No amendment, alteration or repeal of this Agreement shall adversely affect any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. No waiver of any of the provisions of this Agreement shall constitute or be deemed a waiver of any other provision of this Agreement nor shall any waiver constitute a continuing waiver.

25. **Notices.** All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail or otherwise delivered by hand, messenger or courier service addressed:

(a) if to Indemnitee, to Indemnitee's address, facsimile number or electronic mail address as shown on the signature page of this Agreement or in the Company's records, as may be updated in accordance with the provisions hereof; or

(b) if to the Company, to the attention of the President and CEO of the Company at 2929 Seventh Street, Suite 105, Berkeley, CA 94710 or at such other current address as the Company shall have furnished to Indemnitee.

Each such notice or other communication shall for all purposes of this Agreement be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered (or if sent *via* a nationally-recognized overnight courier service, freight prepaid, specifying next-business-day delivery, one business day after deposit with the courier), (ii) if sent *via* mail, at the earlier of its receipt or five days after the same has been deposited in a regularly-maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid, or (iii) if sent *via* facsimile, upon confirmation of facsimile transfer or, if sent *via* electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, then on the recipient's next business day.

26. **Applicable Law and Consent to Jurisdiction.** This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court of Chancery, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court of Chancery for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, The Corporation Trust Company, Wilmington, Delaware as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court of Chancery, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court of Chancery has been brought in an improper or inconvenient forum.

27. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

28. **Captions.** The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

(*signature page follows*)

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

CARIBOU BIOSCIENCES, INC.

(*Signature*)

(*Print name*)

(*Title*)

INDEMNITEE

(*Signature*)

(*Print name*)

(*Street address*)

(*City, State and ZIP*)

Exhibit 10.51

SCIENTIFIC ADVISORY BOARD AGREEMENT

This Scientific Advisory Board Agreement ("Agreement"), effective as of June 18, 2012 ("Effective Date"), is made between Caribou Biosciences, Inc. ("Company"), a Delaware corporation, and Jennifer A. Doudna ("Advisor") (each may be referred to below individually as a "party" and collectively as the "parties").

BACKGROUND/RECITALS

Advisor is involved in and possesses significant expertise and skill in fields of particular interest to the Company, the Company wishes to retain Advisor as a member of the Company's Scientific Advisory Board, and Advisor desires to provide such Services.

NOW, THEREFORE, in consideration of the mutual covenants and undertakings hereinafter set forth, the parties hereto hereby agree as follows:

AGREEMENT

1. Services

(a) In General. In general, Advisor will provide advice, counsel and Services (as defined below) to the Company's officers, directors, employees and agents as described below.

(b) Services. Advisor will serve on the Scientific Advisory board of the Company (the "Advisory Board") and will use reasonable efforts to attend Advisory Board meetings as requested from time-to-time by the Company's CEO and to render advice on issues discussed at such meetings, and will advise the Company's executive officers in furtherance of the Company's goals and objectives on an as-needed, as-available basis (collectively the "Services"). Any projects or activities Advisor agrees to perform in excess of the scope of Services would be undertaken on a mutually agreed-upon basis outside the terms of this Agreement. The Company will provide Advisor with reasonable advance notice of Advisory Board meetings.

2. Fees and Expenses.

(a) Consideration. The Advisor shall not receive any consideration for the Services rendered by Advisor as described above.

(b) Reimbursement of Expenses. Company shall reimburse Advisor for (i) Advisor's approved reasonable out-of-pocket expenses incurred in connection with Advisory Board meeting attendance, and (ii) other approved reasonable out-of-pocket expenses directly related to the Services. Advisor shall provide an itemized expense statement for such reimbursable expenses, and payments shall be made by the Company within 30 days of receipt.

3. Term.

(a) The term of this Agreement will begin on the Effective Date and will end on the fourth anniversary thereof or upon earlier termination as provided below (the " Term").

(b) In addition to termination upon expiration, either party may terminate the Agreement at any time for any reason upon five (5) days prior written notice.

4. Confidential Information.

(a) Each party who receives information hereunder (the "Recipient") understands that the other party (the "Discloser") has disclosed or may disclose the information as described below, which has commercial value in the Discloser's business and is confidential or proprietary in nature. "Confidential Information" means (i) nonpublic information which is held by the Discloser as confidential or proprietary and relates to a party's technology, customers,

business plans, promotional and marketing activities, finances and other business affairs, and (ii) third-party information that a party is obligated to keep confidential. The recipient shall protect Confidential Information hereunder that: (i) is disclosed in a tangible or visual form and clearly labeled as "Confidential;" or (ii) is disclosed in a non-tangible, visual or oral form, identified at the time of disclosure as Confidential Information.

(b) Nondisclosure and Nonuse. Recipient agrees that the Confidential Information (i) will not be disclosed to third parties without the prior written consent of the Discloser, and (ii) will be used only in connection with the Services and will not be used in any way that is detrimental to the Discloser.

(c) Exclusions. Confidential Information does not include any information that (i) is or becomes publicly available without breach of this Agreement, (ii) can be shown to have been known to Recipient at the time of its receipt from the Company, (iii) is received from a third party who did not acquire or disclose such information by a wrongful or tortuous act, or (iv) can be shown to have been independently developed by the Recipient without reference to any Confidential Information.

(d) The obligations under this Section 4 shall continue for a period of 5 years after disclosure.

5. Copyrights/Improvements/Inventions. Advisor acknowledges that all copyright and other intellectual property rights in the products and technology of Company and the written material relevant thereto belong to and will remain the sole property of the Company, including any improvements or enhancements thereto however generated. Nothing in this Agreement shall be construed as granting any rights under any patent, copyright or other intellectual property right of the Company, nor shall this Agreement grant Advisor any rights in or to the Company's Proprietary Information, except the limited right to use the Proprietary Information in connection with the Services. Advisor further agrees that any inventions, improvements, discoveries, developments, original works of authorship, software, trade secrets or other intellectual property conceived, developed or reduced to practice by the Advisor in the performance of the Services performed by Advisor under this Agreement (the "Inventions") is the proprietary property of the Company. Advisor assigns to the Company and its successors and assigns, without further consideration, Advisor's right, title and interest in and to the Inventions whether or not patentable or copyrightable, and further agrees to execute all applications for patents and/or copyrights, domestic or foreign, assignments and other papers necessary to secure and enforce rights related to the Information.

6. Nonexclusivity. Notwithstanding anything to the contrary herein, nothing shall restrict, limit or prevent Advisor from performing services similar in nature to the Services provided hereunder for any third party, both during and after the term of this Agreement.

7. General Provisions.

(a) Relationship of the Parties. The parties are independent contractors, and this Agreement shall not be interpreted as creating an association, joint venture, or partnership relationship between the parties or as imposing any employment, or partnership obligation or liability on either party: Neither party shall have the authority to create or assume any obligation, express or implied, on behalf of the other party.

(b) Use of Name. It is understood that the name of Advisor and their affiliation with the Company may be required to appear in disclosure documents pursuant to prevailing securities laws, and in other regulatory and administrative filings in the ordinary course of the Company's business, and where such use is reasonably related to Advisor's participation on the Company's Advisory Board. The Company may disclose that Advisor is a member of the Company's Advisory Board, using such specific wording in compliance with this provision as it deems appropriate. Advisor will comment on such specific wording if she believes it is inappropriate, and the parties will work out alternative language. Additionally, Advisor will work with the Company to develop an approved bio or series of bios to describe Advisor background which may be used by the Company at its discretion in the course of describing her connection with the Company. Any other written or recorded use of the name of Advisor shall require the prior review and approval of Advisor. Also, all use of the name of Advisor shall cease upon the termination or expiration of this Agreement, except as otherwise required by law or approved in writing by Advisor.

(c) No Conflict: Valid and Binding. Each party represents and warrants that neither the execution of this Agreement nor the performance of their obligations hereunder will result in a violation or breach of any other agreement or obligation by which the party is bound. The Company further represents and warrants that this Agreement has been duly authorized and upon execution shall be a legally binding obligation of the Company.

(d) No Assignment; Survival. This Agreement may not be assigned, and any attempted assignment shall be void. The following provisions shall survive termination of this Agreement: Sections 4 ("Confidential Information") (according to its terms), 5 ("Copyrights/Improvements/Inventions"), 6 ("Nonexclusivity"), 7 ("Indemnification"), and 8 ("General Provisions").

(e) Miscellaneous. This Agreement shall be governed by the jaws of the State of California excluding its conflict of laws principles, and the parties agree to the nonexclusive jurisdiction of the state and federal courts in Santa Clara County, California for interpreting and enforcing this Agreement and for all actions arising out of this Agreement. If any provision of this Agreement is held by a court or other tribunal of competent jurisdiction to be illegal, invalid or unenforceable, that provision shall be limited or eliminated and this Agreement shall otherwise remain in full force and effect. This Agreement supersedes all prior discussions and writings and constitutes the entire agreement between the parties with respect to the subject matter hereof. No waiver or modification of this Agreement will be binding upon either party unless made in writing and signed by a duly authorized representative of such party and no failure or delay in enforcing any right will be deemed a waiver.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date above.

Caribou Biosciences, Inc.

By: /s/ Rachel Haurwitz

Name: Rachel Haurwitz

Title: President

Advisor: Jennifer A. Doudna

By: /s/ Jennifer A. Doudna

Exhibit 10.52

AMENDMENT NO. 1 TO SCIENTIFIC ADVISORY BOARD AGREEMENT

This Amendment No. 1 ("**Amendment No. 1**") to the Scientific Advisory Board Agreement dated June 18, 2012 (the "**Agreement**"), by and between Jennifer A. Doudna ("**Advisor**"), an individual, and Caribou Biosciences, Inc., a Delaware corporation, having its principal place of business at 2929 7th Street Suite 120, Berkeley, CA 94710 ("**Caribou**") (Advisor and Caribou collectively referred to hereinafter as the "**Parties**"), is entered into as of April 12**,** 2014 (the "**Amendment No. 1 Execution Date**").

WHEREAS, pursuant to the Agreement, Advisor agreed to provide advice, counsel and Services (as defined in the Agreement) under the terms and conditions set forth in the Agreement;

WHEREAS, at the time of the Agreement, the Parties agreed that good and valuable consideration would be exchanged;

WHEREAS, paragraph 2(a) of the Agreement, is amended to fully clarify the Parties' intention that Advisor receive common stock as outlined in the Restricted Common Stock Purchase Agreement, executed July 2, 2012, in exchange for Advisor's Services under the Agreement;

WHEREAS, paragraph 2(a) of the Agreement, contained a clerical error stating that the Advisor receive no consideration, which was not the intent of the Parties;

WHEREAS, the Parties now wish to confirm having reviewed and agreed to include an Exhibit A to the Agreement, which reflects the consideration initially agreed to by the Parties, and having incorporated the terms and conditions thereof into the Agreement;

NOW, THEREFORE, in exchange for good and valuable consideration, receipt of which is hereby acknowledged, the Parties agree as follows:

1. Amendment to Section 2 Fees and Expenses. Section 2(a) of the Agreement is hereby deleted in its entirety and replaced with the following:

   (a) Consideration. The Advisor shall receive the compensation as provided for in Exhibit A for the Services rendered by Advisor as described above and the rights granted to the Company hereunder.

2. Exhibit A. The Exhibit A in Schedule I hereto is hereby incorporated into the Agreement as Exhibit A.

3. Further Consideration. In further consideration for the Services and rights granted to the Company under the Agreement and in consideration for entering into this Amendment No. 1, Company shall pay to Advisor One Hundred Dollars ($100) within thirty (30) days after the Amendment No. 1 Execution Date.

4. Advisor Acknowledgements. Advisor acknowledges and agrees that, as of the Execution Date, she has been paid or provided all compensation, consideration, reimbursements and any other amounts or entitlements that may have been owed to her by the Company for the Services or otherwise. Advisor also acknowledges and agrees that she has fully complied with the terms and conditions of the Agreement and shall continue to do so.

5. Independent Contractor. Nothing herein is intended to alter Advisor's role as an independent contractor of the Company, as set forth under Section 7(a) of the Agreement. As such, Advisor acknowledges and agrees that Advisor is obligated to report as income all compensation received pursuant to the Agreement, and acknowledges the obligation to pay all applicable self-employment and other taxes thereon. Advisor further acknowledges that it is the intent of the Parties that neither Advisor nor any employees or contractors of Advisor, if any, receive any Company-sponsored

benefits from the Company either as a consultant or employee. Such benefits include, but are not limited to, paid vacation, sick leave, medical insurance, and 401(k) participation. If Advisor is reclassified by a state or federal agency or court as an employee, for whatever reason, Advisor will become a reclassified employee and will receive no benefits except those mandated by state or federal law, even if by the terms of the Company's benefit plans in effect at the time of reclassification she would otherwise be eligible for such benefits.

6. No Other Amendments. No amendments are made other than those expressly set forth in this Amendment No. 1, and all provisions of the Agreement unaffected by this Amendment No. 1 remain in full force and effect. In the event of a conflict between the Agreement and this Amendment No. 1, this Amendment No. 1 shall control.

7. Entire Agreement. This Amendment No. 1 sets forth the entire agreement and understanding between the Parties with respect to the amendment of the Agreement, and supersedes all previous agreements, promises, representations, understandings and negotiations, whether written or oral, between the Parties, with respect to the amendment and addition of the same.

8. Counterparts. This Amendment No. 1 may be executed in two or more counterparts, each of which shall constitute an original, and all of which together shall constitute a single instrument.

9. Governing Law. This Amendment No. 1 will be governed by the laws of the State of California (with the exception of its conflict of laws provisions).

[Signature page follows]

IN WITNESS WHEREOF, the Parties have executed this Amendment No. 1 as of the Amendment No. 1 Effective Date.

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel Haurwitz

Name: RACHEL HAURWITZ

Title: PRESIDENT AND CEO

JENNIFER A. DOUDNA.

By: /s/ Jennifer A. Doudna

Name: JENNIFER A. DOUDNA

Title: SCIENTIFIC ADVISOR

SCHEDULE I to AMENDMENT NO. 1 TO
SCIENTIFIC ADVISORY BOARD AGREEMENT

Exhibit A
Compensation

In consideration for the Services rendered and the rights granted to Company, the Company and Advisor have entered into that certain Restricted Common Stock Purchase Agreement dated July 2, 2012 between Company and Advisor for the purchase of common stock of Company.

Exhibit 10.53

Amendment No. 2 to Scientific Advisory Board Agreement

This Amendment No. 2, effective May 31, 2016 ("Amendment Effective Date"), is made to the Scientific Advisory Board Agreement, dated June 18, 2012, as amended by Amendment No. 1 to Scientific Advisory Board Agreement, dated April 12, 2014 (collectively, the "SAB Agreement"), and is by and between Caribou Biosciences, Inc. (the "Company"), a Delaware corporation having its address at 2929 7th Street, Suite 105, Berkeley, CA 94710, and Jennifer A. Doudna ("Advisor"), an individual. Each may be referred to as a "party" and collectively as the "parties." Any capitalized term used herein that is not defined shall have the meaning ascribed to it in the SAB Agreement.

WHEREAS, the SAB Agreement will expire on June 18, 2016, and the parties wish to extend the Term of the Agreement for an additional two (2) years;

NOW, THEREFORE, in consideration of the mutual covenants and undertakings hereinafter set forth, the parties agree as follows:

1. Section 3(a) of the Agreement is hereby amended to replace "fourth" with "sixth" and the Term shall now expire on June 18, 2018.

2. Except as set forth in Paragraph 1 above, the terms and conditions of the SAB Agreement remain in full force and effect and the parties hereby ratify and confirm the SAB Agreement in all respects.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Scientific Advisory Board Agreement as of the Amendment Effective Date.

Caribou Biosciences, Inc.

/s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President & CEO

Jennifer A. Doudna

/s/ Jennifer A. Doudna

Exhibit 10.54

Amendment No. 3 to Scientific Advisory Board Agreement

This Amendment No. 3, effective January 1, 2017 ("Amendment Effective Date"), is made to the Scientific Advisory Board Agreement, dated June 18, 2012, as amended by Amendment No. 1 to Scientific Advisory Board Agreement, dated June 18, 2012, and Amendment No. 2 to Scientific Advisory Board Agreement, dated May 31, 2016 (collectively, the "SAB Agreement"), and is by and between Caribou Biosciences, Inc. (the "Company"), a Delaware corporation, and Jennifer A. Doudna ("Advisor"), an individual. Each may be referred to as a "party" and collectively as the "parties." Any capitalized term used herein that is not defined has the meaning ascribed to it in the SAB Agreement.

WHEREAS, in light of the Company's business focus and strategy, and for purposes of compliance with the policies of the Howard Hughes Medical Institute, Advisor's employer ("HHMI"), the parties wish to amend the SAB Agreement as set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants and undertakings hereinafter set forth, the parties agree as follows:

1. Article 1 of the SAB Agreement is hereby amended by adding a new Section 1(c) as set forth below; additionally, the SAB Agreement is hereby amended by adding a new Exhibit B as attached hereto, which will be executed by the Parties simultaneously with the execution of this Amendment No. 3 to Scientific Advisory Board Agreement. The amendments set forth in this Paragraph 1, including the addition of Exhibit B to the SAB Agreement, are effective as of the Effective Date of the SAB Agreement (June 18, 2012).

   "(c). HHMI Provisions. Attached to this Agreement as Exhibit B are the Howard Hughes Medical Institute Uniform Consulting Agreement Provisions (the "HHMI Uniform Provisions"). The Parties agree that the HHMI Uniform Provisions are an integral part of this Agreement. In the event of any conflict between this Agreement and the HHMI Uniform Provisions, the HHMI Uniform Provisions shall govern."

2. Article 3 of the SAB Amendment is deleted in its entirety and replaced with the following as of the Amendment Effective Date:

   "3. Term.

   (a) The term of this Agreement will begin on the Effective Date and will end on December 31, 2020, unless terminated earlier pursuant to Section 3(b) or (c), or extended by mutual agreement of the Company and Advisor.

   (b) Advisor may terminate this Agreement without cause upon thirty (30) days' prior written notice to the Company at any time during the Term.

   (c) Either party may terminate this Agreement for a material breach by the other party upon thirty (30) days' prior written notice (which notice shall describe the breach in reasonable detail) if the other party does not cure the breach within such thirty (30)-day period."

3. Subject to Paragraph 4 below, during the period commencing on the Amendment Effective Date until December 31, 2020, the Company will pay Advisor thirty-one thousand, two hundred fifty U.S. dollars ($31,250) per calendar quarter, for a total of one hundred twenty-five thousand U.S. dollars ($125,000) per calendar year for services provided under the SAB Agreement. The first payment will be due and payable by the Company to Advisor on March 31, 2017, with future payments due and payable on the last day of each preceding calendar quarter. In the event that the SAB Agreement is terminated during a calendar quarter pursuant to Section 3(b) of the SAB Agreement or by the Company pursuant to Section 3(c) of the SAB Agreement, the Company will prorate the payment due and payable for such calendar quarter on a monthly basis and no payments will be due thereafter *(e.g.*, if termination of the Agreement occurs on November 11, 2018, Advisor will receive $20,833.33 for fourth quarter 2018). Nothing in this Amendment is intended to alter the independent contractor status of Advisor or affect consideration previously provided to Advisor by the Company.

4. The Company and Advisor are simultaneously entering into a separate AgCo Scientific Advisory Board Agreement (the "AgCo SAB Agreement"). In the event the AgCo SAB Agreement is terminated, as set forth therein, the payments set forth in Paragraph 2 above will immediately cease upon termination of the AgCo SAB Agreement. If termination of the AgCo SAB Agreement occurs during a calendar quarter, payments due under the SAB Agreement for that calendar quarter will be pro-rated on a monthly basis and no payments will be due thereafter.

5. Except as set forth in Paragraphs 1, 2, 3, and 4 above, the terms and conditions of the SAB Agreement remain in full force and effect, and the parties hereby ratify and confirm the SAB Agreement.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 3 to Scientific Advisory Board Agreement as of the Amendment Effective Date.

Caribou Biosciences, Inc.

/s/ Rachel E. Haurwitz

Rachel E. Haurwitz
President & CEO

Jennifer A. Doudna

/s/ Jennifer A. Doudna

THE HOWARD HUGHES MEDICAL INSTITUTE
UNIFORM CONSULTING AGREEMENT PROVISIONS

1. The Howard Hughes Medical Institute ("HHMI") employs laboratory heads at major universities, medical schools, research institutes, and hospitals throughout the United States (each, a "Host Institution"). These Uniform Consulting Agreement Provisions (the "Uniform Provisions") are attached to an agreement (the "Agreement") under which an HHMI laboratory head (the "Consultant") has agreed to provide consulting services to the company named in the Agreement (the "Company"). The Consultant and the Company agree that the Agreement shall have no force or effect unless these Uniform Provisions are signed by both parties and attached to the Agreement. By signing the Uniform Provisions, the Consultant and the Company agree to abide by them, and also agree that if anything in the Agreement or any other agreement that the Consultant executes in connection with his or her provision of consulting services to the Company is inconsistent with the Uniform Provisions, the Uniform Provisions shall govern.

2. The Agreement shall disclose all compensation of whatever kind that is to be provided to the Consultant in connection with the consulting services. Compensation for consulting may include fixed amounts of cash and equity (such as stock or stock options) but may not include incentive or contingent features, such as bonuses based on performance or upon achievement of scientific or operational milestones of the Company.

3. (a) The following applies if the Company's stock is publicly traded on a securities exchange: The Consultant will at no time hold more than 5 percent of the equity of the Company, as calculated in accordance with HHMI Policy SC-500, Consulting for Companies — General Policy, available at http://www.hhmi.org/about/policies#consulting. If equity is to be issued to the Consultant in connection with the provision of consulting services, the Consultant must provide all relevant documents to HHMI for review and approval.

   (b) The following applies if the Company's stock is not publicly traded on a securities exchange: The Company and the Consultant each acknowledge that they have reviewed HHMI Policy SC-500, Consulting for Companies — General Policy and HHMI Policy SC-520, Consulting for and Equity Ownership in Start-Up and Other Private Companies, available at http://www.hhmi.org/about/policies#consulting. The Consultant agrees that he or she will, and the Company agrees that Consultant will be permitted to, reduce his or her equity ownership in the Company as necessary in order to remain in compliance with HHMI Policy SC-500 and HHMI Policy SC-520 at all times. The Company and the Consultant agree to provide information to HHMI upon request that will allow HHMI to confirm compliance with HHMI's policies. In addition, Consultant must provide all documents relating to equity ownership that the Consultant will be asked to sign to HHMI for its prior review and approval.

4. The Consultant's services for the Company shall consist only of the discussion of ideas and provision of advice; the Consultant shall not direct or conduct research for or on behalf of the Company.

5. The Company acknowledges that the Consultant is an HHMI employee and is subject to HHMI's policies, including policies concerning consulting, conflicts of interest, and intellectual property. In accordance with HHMI policy, the Consultant may disclose to the Company any information that the Consultant would normally freely disclose to other members of the scientific community at large, whether by publication, by presentation at seminars, or in informal scientific discussions. However, the Consultant shall not disclose to the Company information that (i) is proprietary to HHMI or the Host Institution and (ii) is not generally available to the public, except through formal technology transfer procedures.

6. Subject to the terms of paragraph 7, below, the Consultant may assign to the Company any right, title and interest the Consultant may have in any invention, discovery, improvement, or other intellectual property which the Consultant (whether alone or with others) develops (i) during the course of performing consulting services for the Company under the Agreement and (ii) outside the course of the Consultant's activities as an HHMI employee or faculty member of the Host Institution.

7. The Company shall have no rights by reason of the Agreement in any publication, invention, discovery, improvement, or other intellectual property whatsoever, whether or not publishable, patentable, or copyrightable, which is developed as a result of a program of research financed, in whole or in part, by funds provided by or under the control of HHMI or the Host Institution. The Company also acknowledges and agrees that it will enjoy no priority or advantage as a result of the consultancy created by the Agreement in gaining access, whether by license or otherwise, to any proprietary information or intellectual property that arises from any research undertaken by the Consultant in his or her capacity as an employee of HHMI or a member of the faculty of the Host Institution.

8. The Company agrees, at its sole expense, to defend HHMI against, and to indemnify and hold HHMI harmless from, any claim, liability, judgment, cost, expense, damage, deficiency, loss, or obligation, of any kind or nature (including without limitation reasonable attorneys' fees and other costs and expenses of defense) relating to a claim or suit by a third party against HHMI, either arising from the Agreement, the Consultant's performance of services for the Company under the Agreement, or any Company products or services which result from the Consultant's performance of services under the Agreement.

9. Nothing in the Agreement shall affect the Consultant's right to use, disseminate, or publish any information that (i) is or becomes available to the public through no breach of the Agreement by the Consultant; (ii) is obtained by the Consultant from a third party who had the legal right to disclose the information to the Consultant; or (iii) is already in the possession of the Consultant on the date the Agreement becomes effective. In addition, the Company's confidential information does not include information generated by the Consultant (whether alone or with others) unless the Consultant generated the information (i) during the course of performing consulting services for the Company under the Agreement and (ii) outside the course of the Consultant's activities as an HHMI employee or Host Institution faculty member. Nothing in the Agreement shall prevent the Consultant from disclosing the Company's confidential information to the extent it is required to be disclosed by law, government regulation, or court order, provided that the Consultant takes reasonable steps to provide the Company with sufficient prior notice to allow the Company to consent to the disclosure or seek a protective order.

10. The Company acknowledges and agrees that nothing in the Agreement shall affect the Consultant's obligations to HHMI or the Host Institution, the Consultant's research on behalf of HHMI or the Host Institution, the Consultant's ability to submit and publish the results of HHMI or Host Institution research, or research collaborations in which the Consultant is a participant, and that the Agreement shall have no effect upon transfers (by way of license or otherwise) to third parties of materials or intellectual property developed in whole or in part by the Consultant as an HHMI employee or Host Institution faculty member.

11. The Consultant has the right to terminate the Agreement at any time by providing at least thirty (30) days written notice of termination (or such shorter notice period as may be provided in the Agreement) to the Company.

12. Paragraphs 6, 7, 8, 9, 11, 12, 13, 14 and 15 of these Uniform Provisions shall survive termination of the Agreement.

13. The Company may use the Consultant's name, and in doing so may cite the Consultant's relationship with HHMI, so long as any such usage (i) is limited to reporting factual events or occurrences only, and (ii) is made in a manner that could not reasonably constitute an endorsement of the Company or of any Company program, product or service. However, the Company shall not use the Consultant's name or HHMI's name in any press release, or quote the Consultant in any company materials, or otherwise use the Consultant's name or HHMI's name in a manner not specifically permitted by the preceding sentence, unless in each case the Company obtains in advance HHMI's written consent, and, in the case of the use of the Consultant's name, the Consultant's consent as well.

14. The Consultant and the Company acknowledge that (i) the Consultant is entering into the Agreement and these Uniform Provisions in the Consultant's individual capacity and not as an employee or agent of HHMI, (ii) HHMI is not a party to the Agreement or the Uniform Provisions and has no liability or obligation under them, and (iii) HHMI is an intended third-party beneficiary of the Agreement and the Uniform Provisions and certain provisions of the Agreement and the Uniform Provisions are for HHMI's benefit and are enforceable by HHMI in its own name.

15. If the Agreement is governed by California law, the parties acknowledge and agree that the Agreement is not a contract of employment under California law, and the Consultant is not an employee of the Company for any purpose under California law.

16. These Uniform Provisions shall be in effect for the full term of the Agreement. The Company and the Consultant agree that any amendment of the Agreement (including, without limitation, any extension of the Agreement's term or any change in the consideration to be provided to the Consultant under the Agreement) or any other departure from the terms or conditions of the Agreement must be signed by the Consultant and an authorized representative of the Company, and also is subject to HHMI's prior written approval.

17. If any of these Uniform Provisions is adjudicated to be invalid, unenforceable, contrary to, or prohibited under applicable laws or regulations of any jurisdiction, the Agreement shall terminate as of the date such adjudication is effective.

Company: Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz, Ph.D.
Name: Rachel E. Haurwitz, Ph.D
Title: President & CEO
Date: Feb 28, 2017

Consultant:

By: /s/ Jennifer A. Doudna, Ph.D.
Name: Jennifer A. Doudna, Ph.D
Date:

Exhibit 10.55

Amendment No. 4 to Scientific Advisory Board Agreement

This Amendment No. 4, effective March 31, 2018 ("Amendment Effective Date"), is made to the Scientific Advisory Board Agreement, dated June 18, 2012, as amended by Amendment No. 1 to Scientific Advisory Board Agreement, dated June 18, 2012, Amendment No. 2 to Scientific Advisory Board Agreement, dated May 31, 2016, and Amendment No. 3 to Scientific Advisory Board Agreement, dated January 1, 2017 ("Amendment No. 3") (and collectively, the "SAB Agreement"), and is by and between Caribou Biosciences, Inc. (the "Company"), a Delaware corporation, and Jennifer A. Doudna ("Advisor"), an individual. Each may be referred to as a "party" and collectively as the "parties." Any capitalized term used herein that is not defined has the meaning ascribed to it in the SAB Agreement.

WHEREAS, Company and Advisor simultaneously with Amendment No. 3 entered into a separate AgCo Scientific Advisory Board Agreement (the "AgCo SAB Agreement") on January 1, 2017, and the parties have mutually agreed to terminate the AgCo SAB Agreement effective March 31, 2018;

WHEREAS, as set forth in Amendment No. 3, termination of the AgCo SAB Agreement would trigger cessation of payments from Company to Advisor under the SAB Agreement, and the parties desire instead to continue payments from Company to Advisor under the SAB Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and undertakings hereinafter set forth, the sufficiency of which is acknowledged, the parties agree as follows:

1. Paragraph 4 of Amendment No. 3 is hereby deleted in its entirety as of the Amendment Effective Date set forth above.

2. Paragraph 5 of Amendment No. 3 is hereby deleted in its entirety and replaced with the following Paragraph 4 as of the Amendment Effective Date:

   "4. Except as set forth in Paragraphs 1, 2, and 3 above, the terms and conditions of the SAB Agreement remain in full force and effect, and the parties hereby ratify and confirm the SAB Agreement."

IN WITNESS WHEREOF, the parties have executed this Amendment No. 4 to Scientific Advisory Board Agreement as of the Amendment Effective Date.

Caribou Biosciences, Inc.

/s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President & CEO

Jennifer A. Doudna

/s/ Jennifer A. Doudna

Exhibit 10.56

Amendment No. 5 to Scientific Advisory Board Agreement

This Amendment No. 5 to Scientific Advisory Board Agreement ("Amendment No. 5"), effective January 1, 2020 ("Amendment No. 5 Effective Date"), is made to the Scientific Advisory Board Agreement, dated June 18, 2012, as amended by Amendment No. 1 to Scientific Advisory Board Agreement, dated June 18, 2012, Amendment No. 2 to Scientific Advisory Board Agreement, dated May 31, 2016, Amendment No. 3 to Scientific Advisory Board Agreement, dated January 1, 2017, and Amendment No. 4 to Scientific Advisory Board Agreement, dated March 31, 2018 (collectively, the "SAB Agreement"), and is by and between Caribou Biosciences, Inc. (the "Company"), a Delaware corporation, and Jennifer A. Doudna ("Advisor"), an individual. Each may be referred to as a "party" and collectively as the "parties." Any capitalized term used in this Amendment No. 5 that is not defined herein has the meaning ascribed to it in the Agreement.

WHEREAS, in light of the Company's current financial condition and business strategy, the parties wish to amend the Agreement as set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants and undertakings hereinafter set forth, the parties agree as follows:

1. Article 3 of the Agreement is deleted in its entirety and replaced with the following as of the Amendment No. 5 Effective Date:

"3. Term.

(a) The term of this Agreement will begin on the Effective Date and will end on December 31, 2024, unless terminated earlier pursuant to Section 3(b) or (c), or extended by mutual agreement of the Company and Advisor.

(b) Advisor may terminate this Agreement without cause upon thirty (30) days' written notice to the Company at any time during the Term.

(c) Either party may terminate this Agreement for a material breach by the other party upon thirty (30) days' prior written notice if the other party does not cure the breach within such thirty (30)-day period."

2. During the period commencing on the Amendment No. 5 Effective Date until such date as the Company closes a Series C preferred financing of at least fifty million U.S. dollars (US$50,000,000) ("Series C Financing"), the Company will pay Advisor six thousand, two hundred fifty U.S. dollars ($6,250) per calendar quarter, for a total of twenty-five thousand U.S. dollars ($25,000) per calendar year for services provided under the Agreement. After close of the Series C Financing, the Company will pay Advisor thirty-one thousand, two hundred fifty U.S. dollars ($31,250) per calendar quarter, for a total of one hundred twenty-five thousand U.S. dollars ($125,000) per calendar year for services provided under the Agreement. The first payment under this Amendment No. 5 will be due and payable by the Company to Advisor on March 31, 2020, with future payments due and payable on the last day of each preceding calendar quarter. In the event that the Series C Financing closes during a calendar quarter, the Company will pro-rate the payment due and payable for such calendar quarter on a monthly basis (e.g., if the Series C Financing closes on August 17, 2020, Advisor would receive $22,916.67 ($2,083.33 for July, $10,416.67 for August, and $10,416.67 for September) for second quarter 2020, payable on September 30, 2020). Nothing in this Amendment No. 5 is intended to alter the independent contractor status of Advisor or affect consideration previously provided to Advisor by the Company.

3. Except as set forth in Paragraphs 1 and 2 above, the terms and conditions of the Agreement remain in full force and effect, and the parties hereby ratify and confirm the Agreement.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 5 to Scientific Advisory Board Agreement as of the Amendment No. 5 Effective Date.

Caribou Biosciences, Inc.

/s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President & CEO

Jennifer A. Doudna

/s/ Jennifer A. Doudna

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.57

[***] SCIENTIFIC ADVISORY BOARD AGREEMENT

This [***] Scientific Advisory Board Agreement (this "Agreement") is made and entered into as of January 1, 2017 (the "Effective Date"), and is by and between Caribou Biosciences, Inc., a Delaware corporation, and Jennifer A. Doudna, an individual ("Advisor") (each herein referred to individually as a "Party," or collectively as the "Parties").

WHEREAS, the Company desires for Advisor to serve as scientific advisor and founder of [***] to be formed by the Company [***]; and

WHEREAS, Advisor is willing and able to perform this role;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Agreement, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Services and Compensation

A. General. As requested by the Company or [***], Advisor will provide scientific advice and Services (as defined in Section 1(B)) to stakeholders of the Company and [***].

B. Services. Advisor will be a founder of [***] and will serve on its Scientific Advisory Board during the Term (as defined herein). Advisor will use reasonable efforts to participate in meetings and discussions with the Company relating to [***], as well as meetings and discussions with [***] and to render advice on scientific and business issues, goals and objectives, as requested from time-to-time by the Company or [***] ("Services").

C. Compensation. (i) Subject to Article 5, during the Term (as defined in Section 5(A)), the Company or [***] will pay Advisor thirty-one thousand, two hundred fifty U.S. dollars ($31,250) per calendar quarter, for a total of one hundred twenty-five thousand U.S. dollars ($125,000) per calendar year for Services provided hereunder. The first payment will be due and payable by the Company or [***] to Advisor on March 31, 2017, with future payments due and payable on the last day of each preceding calendar quarter. (ii) The Company or [***] will reimburse Advisor for Advisor's pre-approved reasonable out-of-pocket expenses incurred in connection with the Services, including but not limited to payment of reasonable attorney fees and costs relating to Advisor's personal attorney's review and negotiation of this Agreement and any subsequent agreements relating to Advisor's provision of the Services, up to a maximum of ten thousand U.S. dollars ($10,000) for such attorney fees and costs. Advisor will provide expense reports, with original receipts, to the Company or [***] for all reimbursements. (iii) At the time [***] is formed (whether as a partnership or corporation), Advisor will receive a number of shares or units, as the case may be, of [***] Common Stock equal to five percent (5%) of the fully diluted capital stock of [***] (including shares reserved for issuance pursuant to any stock option plan, equity incentive plan, or other stock arrangement). Furthermore, at the time [***] closes a financing of at least five million U.S. dollars ($5,000,000), Advisor will be granted additional shares or units, as the case may be, of [***] Common Stock such that Advisor's total shares of [***] Common Stock will equal five percent (5%) of the fully diluted capital stock of [***] after the closing of said financing, regardless of the amount of financing raised over five million U.S. dollars ($5,000,000). At the time [***] is formed, [***] and Advisor will enter into a Restricted Common Stock Purchase Agreement similar in form and substance to that entered into by and between Caribou Biosciences, Inc. and Jennifer A. Doudna, having a date of June 13, 2012. The Restricted Common Stock Purchase Agreement will set forth the number of shares of [***] Common Stock to be sold to Advisor, the purchase price per share, and the aggregate purchase price, which shall be payable in cash by Advisor to [***]. Furthermore, Advisor's shares shall vest in a series of forty-eight (48) equal and continuous monthly installments upon Advisor's completion of each additional month of continuous Service over the forty-eight (48) month period measured from the Effective Date, such that Advisor shall be fully vested in all [***] Common Stock shares or units, as the case may be at the end of the Term (including both the initial grant as well as the additional shares received at the closing of a financing of at least five million U.S. dollars ($5,000,000)). (iv) Related cash compensation is addressed in Paragraphs 3 and 4 of Amendment No. 3 to Scientific Advisory Board Agreement, by and between Caribou Biosciences, Inc. and Jennifer A. Doudna, having an effective date of January 1, 2017.

D. No Conflicts. Advisor represents and warrants that Advisor has no agreements, relationships, or commitments to any other person or entity that conflict with the provisions of this Agreement, Advisor's obligations to the Company under this Agreement, and/or Advisor's ability to perform the Services.

E. Exclusivity. Advisor will not enter into any such agreement with any commercial or venture capital entity in the field of [***]. Any breach of this Section 1(E) is a material breach of this Agreement.

2. Independent Contractor Relationship

A. Nature of Relationship. It is the express intention of the Company (or, if appropriate, [***]) and Advisor that Advisor performs the Services as an independent contractor to the Company or [***]. Nothing in this Agreement shall in any way be construed to constitute Advisor as an agent, employee or representative of the Company or [***]. Advisor is not authorized to bind the Company or [***] to any liability or obligation or to represent that Advisor has any such authority. Advisor shall be solely responsible for all taxes, including but not limited to social security, unemployment and income taxes, that may be due on account of compensation received by Advisor from the Company or [***] under this Agreement. On the Company's request, Advisor will provide the Company with a fully completed and signed IRS Form W-9.

B. No Benefits. Advisor acknowledges and agrees she is not eligible to receive any employee benefits from the Company or [***]. Such benefits include, but are not limited to, paid vacation, sick leave, medical insurance, and the like.

C. [***]

1. Confidentiality

D. Definition. "Confidential Information" means: (i) any information disclosed (directly or indirectly) by the Company or [***] to Advisor pursuant to this Agreement, including but not limited to research and development, intellectual property, regulatory, clinical trials, products and product plans, equipment, customers, markets, business plans, software, inventions, discoveries, ideas, processes, designs, drawings, formulations, specifications, marketing and finance documents, prototypes, samples, data sets, and the like that is in written, graphic, machine readable, or other tangible form, and marked as "Confidential" or "Proprietary" or in some other manner to indicate its confidential nature; and (ii) oral information disclosed (directly or indirectly) by the Company or [***] to Advisor pursuant to this Agreement, provided that such information is designated as confidential at the time of its disclosure. Confidential Information may include information of a third party that is in the possession of the Company or [***] and is disclosed to Advisor under this Agreement. Additionally, Confidential Information may include information received and disclosed as confidential or proprietary information during visits to the facilities of the Company or [***].

E. Exceptions. Confidential Information shall not, however, include any information that: (i) was publicly known or made generally available without a duty of confidentiality prior to the time of disclosure by the Company or [***] to Advisor; (ii) becomes publicly known or made generally available without a duty of confidentiality after disclosure by the Company or [***] to Advisor through no wrongful action or inaction of Advisor; (iii) is in the rightful possession of Advisor without confidentiality obligations at the time of disclosure by the Company or [***] to Advisor as shown by Advisor's then-contemporaneous written files and records kept in the ordinary course of business; (iv) is obtained by Advisor from a third party without an accompanying duty of confidentiality and without a breach of such third party's obligations of confidentiality; or (v) is independently developed by Advisor without use of or reference to Confidential Information of the Company or [***], as shown by written records and other competent evidence prepared contemporaneously with such independent development.

F. Compelled Disclosure. If Advisor becomes legally compelled to disclose any Confidential Information of the Company or [***], Advisor will provide the Company or [***], as appropriate, prompt written notice and will use her reasonable efforts to assist the Company or [***], as appropriate, in the Company's or [***]'s efforts to seek a protective order or another appropriate and legally available remedy. If the Company or [***], as appropriate, waives Advisor's compliance with this Agreement or fails to obtain a protective order or other legally

available remedy, Advisor will furnish only that portion of the Confidential Information that is legally required to be disclosed; provided that any Confidential Information so disclosed shall maintain its confidentiality protection for all purposes other than such legally compelled disclosure.

G. Non-Disclosure; Ownership; No License. Advisor shall not use any Confidential Information of the Company or [***] except as necessary to perform the Services. Advisor shall not disclose any Confidential Information to any third party. All documents and other tangible objects containing or representing Confidential Information that have been disclosed by the Company or [***] to Advisor, and all copies or extracts thereof or notes derived therefrom that are in the possession of Advisor, shall be and remain the property of the Company or [***]. Nothing in this Agreement is intended to grant any rights by the Company or [***] to Advisor under any intellectual property, including but not limited to patents, copyrights, trademarks, and the like.

2. Ownership of Inventions

In consideration for the compensation paid to Advisor by the Company or [***] hereunder, Advisor agrees that all right, title, and interest in and to any intellectual property, including but not limited to inventions (whether patentable or not), copyrightable materials, notes, records, drawings, designs, improvements, developments, discoveries, ideas and trade secrets conceived, discovered, authored, invented, developed or reduced to practice by Advisor, solely or in collaboration with others, during the Term of this Agreement if in the course of performing Services for the Company or [***] under this Agreement and outside the course of Advisor's activities as an MIMI employee or faculty member of UC Berkeley (collectively, "Inventions") are the sole property of the Company or [***], as the case may be. Advisor also agrees to promptly make full written disclosure to the Company or [***] of any Inventions and to assign (or cause to be assigned), and hereby irrevocably does assign fully to the Company (or, in the event this Agreement is assigned to [***] pursuant to Section 7(B), to [***]), all right, title and interest in and to the Inventions. Advisor agrees to execute, or have executed, any necessary documents required for such assignment. Additionally, at the Company's or [***]'s expense, Advisor will cooperate fully in the prosecution of any patent application resulting from any Invention.

1. Term and Termination

A. Term. The term of this Agreement will begin on the Effective Date of this Agreement and will until December 31, 2020 (the "Term"), unless extended by mutual agreement or terminated. This Agreement may be extended by mutual agreement of the Parties.

B. Termination by Advisor. Advisor may terminate this Agreement for any reason upon giving the Company or [***] thirty (30) days' prior written notice of such termination.

C. Termination for Breach. Either party may terminate this Agreement for a material breach by the other party upon thirty (30) days' prior written notice (which notice shall describe the breach in reasonable detail) if the other party does not cure the breach within such thirty (30)-day period.

D. Effect of Termination of Caribou SAB Agreement. The Company and Advisor are simultaneously entering into a separate Amendment No. 3 to Scientific Advisory Board Agreement (the "Caribou SAB Agreement"). In the event the Caribou SAB Agreement is terminated, as set forth therein, the payments under Section 1(C)(i) of this Agreement will immediately cease upon termination of the Caribou SAB Agreement. If termination of the Caribou SAB Agreement occurs during a calendar quarter, payments due under this Agreement for that calendar quarter will be pro-rated on a monthly basis and no payments will be due thereafter *(e.g.*, if termination of the Agreement occurs on May 11, 2019, Advisor will receive $20,833.33 for the second quarter 2019).

E. Effect of Termination or Expiration; Survival. (i) Upon any termination or expiration of this Agreement, all rights and duties of the Company or [***] and Advisor toward each other shall cease except (i) in the event that this Agreement is terminated during a calendar quarter pursuant to Section 5(B) by Advisor or by the Company or [***] pursuant to Section 5(C), the Company or [***] will pro-rate the payment due and payable for such calendar quarter on a monthly basis and no payments will be due thereafter; (ii) the Company or [***] will pay Advisor for any related reimbursable expenses as set forth in Section 1(C)(ii) within thirty (30) days' of receipt of Advisor's

final invoice; (iii) Advisor will immediately deliver to the Company or [***], as appropriate, and will not keep in Advisor's possession, recreate, or deliver to anyone else, any and all Company or [***] property, including, but not limited to, Confidential Information, tangible embodiments of the Inventions, any reproductions of any of the foregoing items that Advisor may have in Advisor's possession or control; and (iv) Articles 2, 3, 4, 6 and 7, as well as this Section 5(E) will survive termination or expiration of this Agreement. The obligations of Advisor under this Agreement shall survive, with respect to any particular Confidential Information, for a period of five (5) years after the termination or expiration date.

3. Limitation of Liability

IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR DAMAGES FOR LOST PROFITS OR LOSS OF BUSINESS, HOWEVER CAUSED AND UNDER ANY THEORY OF LIABILITY, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHER THEORY OF LIABILITY, REGARDLESS OF WHETHER A PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY. IN NO EVENT SHALL EITHER PARTY'S LIABILITY ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT EXCEED THE AMOUNTS PAID BY THE COMPANY TO ADVISOR UNDER THIS AGREEMENT FOR THE SERVICES, DELIVERABLES OR INVENTION GIVING RISE TO SUCH LIABILITY.

4. Miscellaneous

A. Governing Law; Jurisdiction. This Agreement shall be governed by the laws of the State of California, without regard to the conflicts of law provisions of any jurisdiction, and the Parties expressly consent to the personal and exclusive jurisdiction and venue of the state and federal courts located in California.

B. No Assignment. This Agreement will be binding and upon Advisor's assigns, administrators, and other legal representatives, and will be for the benefit of the Company or [***], as appropriate, as well as each of their successors and assigns. Except for an assignment by the Company to an affiliated entity or via a transfer of all or substantially all of the Company's assets, whether by merger, consolidation, reincorporation, sale of assets or stock, change of control or otherwise, this Agreement shall not be assigned by either Party without the written consent of the other Party; provided, however, that the Company may assign this Agreement to [***] at any time without Advisor's consent and will thereafter provide written notice of such assignment to Advisor.

C. Entire Agreement. Except for the Scientific Advisory Board Agreement, by and between Caribou Biosciences, Inc. and Jennifer A. Doudna, having an effective date of June 18, 2012, as amended (the "Caribou SAB Agreement"), this Agreement, including Exhibit A attached hereto, constitutes the entire agreement and understanding between the Parties with respect to the subject matter herein and supersedes all prior written and oral agreements, discussions, or representations between the Parties, except as explicitly stated herein.

D. Headings. Headings are used in this Agreement for reference only and shall not be considered when interpreting this Agreement.

E. Severability. If a court or other body of competent jurisdiction finds any provision of this Agreement, or portion thereof, to be invalid or unenforceable, such provision will be enforced to the maximum extent permissible so as to effect the intent of the Parties, and the remainder of this Agreement will continue in full force and effect.

F. Amendment. No amendment, modification, waiver, termination or discharge or any provision of this Agreement will be effective unless the same is in writing, specifically identifies this Agreement, and is signed by an authorized representative of each Party.

G. Notices. Any notice or other communication required or permitted by this Agreement to be given to a Party shall be in writing to the address set forth above or as otherwise designated in writing by a Party and shall be deemed given (i) if delivered personally or by commercial messenger or courier service, (ii) when sent by confirmed facsimile or other electronic communication, or (iii) if mailed by U.S. registered or certified mail (return receipt requested), delivery shall be deemed effective three (3) business days after mailing.

H. Publicity. It is understood that the name of Advisor and her affiliation with the Company or [***] may be required to appear in various disclosure documents pursuant to securities and regulatory laws. The Company, [***] and Advisor may publicly disclose that Advisor is a member of the [***] Scientific Advisory Board, as each deems appropriate. Advisor will work with the Company and [***] to develop an approved bio to describe Advisor's background to be used in a manner consistent with the HHMI Uniform Provisions attached hereto as Exhibit A.

I. Counterparts. This Agreement may be signed in any number of counterparts, including facsimile or PDF documents. Each such counterpart, facsimile or scanned PDF document shall be deemed an original instrument, and all of which together shall constitute one and the same executed Agreement.

IN WITNESS WHEREOF, authorized representatives of the Parties hereto have executed this Consulting Agreement as of the Effective Date.

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz, Ph.D.
President & Chief Executive Officer

Jennifer A. Doudna

By: /s/ Jennifer A. Doudna

Exhibit A

[***]

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

Exhibit 10.58

MUTUAL TERMINATION OF THE
[***] SCIENTIFIC ADVISORY BOARD AGREEMENT

This Mutual Termination of the [***] Scientific Advisory Board Agreement ("Mutual Termination") is entered into as of March 17, 2018, and is by and between Caribou Biosciences, Inc., a Delaware corporation ("Company"), and **Jennifer A. Doudna, an individual ("Advisor") (each herein referred to individually as a "Party," or collectively as the "Parties"). Capitalized terms not defined herein shall have the meaning set forth in the [***] Scientific Advisory Board Agreement.**

WHEREAS, the Parties desire to mutually terminate the [***] Scientific Advisory Board Agreement by and between Company and Advisor as set forth herein;

NOW, THEREFORE, in consideration of the mutual agreements contained in this Mutual Termination, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. The [***] Scientific Advisory Board Agreement, by and between Caribou and Advisor dated January 1, 2017, is terminated effective March 31, 2018 ("Effective Termination Date"). Company will pay Advisor a final payment of thirty-one thousand, two hundred fifty U.S. dollars ($31,250) on or before the Effective Termination Date, and no further monies shall be owed under the [***] Scientific Advisory Board Agreement.
2. The Parties acknowledge and ratify the survival provisions set forth in Section 5(E) of the [***] Scientific Advisory Board Agreement.
3. Nothing in this Mutual Termination shall effect the Scientific Advisory Board Agreement between the Parties, dated June 18, 2012, as amended.

IN WITNESS WHEREOF, the Parties hereto have executed this Mutual Termination of the [***] Scientific Advisory Board Agreement.

Caribou Biosciences, Inc.

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz, Ph.D.
President & Chief Executive Officer

Jennifer A. Doudna

By: /s/ Jennifer A. Doudna

Exhibit 10.59

EXECUTION VERSION

SERIES C PREFERRED STOCK PURCHASE AGREEMENT

THIS SERIES C PREFERRED STOCK PURCHASE AGREEMENT (this "**Agreement**"), is made as of March 2, 2021, by and among Caribou Biosciences, Inc., a Delaware corporation (the "**Company**"), and the investors listed on Exhibit A attached to this Agreement (each a "**Purchaser**" and together the "**Purchasers**").

The parties hereby agree as follows:

1. Purchase and Sale of Preferred Stock.

1.1 Sale and Issuance of Series C Preferred Stock.

(a) The Company shall adopt and file with the Secretary of State of the State of Delaware on or before the Initial Closing (as defined below) the Fourth Amended and Restated Certificate of Incorporation in the form of Exhibit B attached to this Agreement (the "**Restated Certificate**").

(b) Subject to the terms and conditions of this Agreement, each Purchaser agrees to purchase at the Initial Closing and the Company agrees to sell and issue to each Purchaser at the Initial Closing that number of shares of Series C Preferred Stock, $0.0001 par value per share (the "**Series C Preferred Stock**"), set forth opposite each Purchaser's name on Exhibit A, at a purchase price of $17.257 per share. The shares of Series C Preferred Stock issued to the Purchasers pursuant to this Agreement (including any shares issued at the Initial Closing and Additional Shares, as defined below) shall be referred to in this Agreement as the "**Shares**."

1.2 Closing; Delivery.

(a) The initial purchase and sale of the Shares shall take place remotely via the exchange of documents and signatures, simultaneously with the execution and delivery of this Agreement, or at such other time and place as the Company and the Purchasers participating in the Initial Closing mutually agree upon, orally or in writing (which time and place are designated as the "**Initial Closing**"). In the event there is more than one closing, the term "**Closing**" shall apply to each such closing unless otherwise specified.

(b) At each Closing, the Company shall deliver to each Purchaser a certificate representing the Shares being purchased by such Purchaser at such Closing against payment of the purchase price therefor by check payable to the Company, by wire transfer to a bank account designated by the Company, or by any combination of such methods.

1.3 Sale of Additional Shares of Preferred Stock. After the Initial Closing, the Company may sell, on the same terms and conditions as those contained in this Agreement, up to all of the authorized shares of Series C Preferred Stock not sold at the Initial Closing (the "**Additional Shares**"), to one or more purchasers (the "**Additional Purchasers**") acceptable to the Company and approved by PFM, Ridgeback, and Farallon (each as defined below) in one or more Closings, provided that (i) any such subsequent sale is consummated prior to forty-five (45) days after the Initial Closing, and (ii) each Additional Purchaser shall become a party to the Transaction Agreements (as defined below) by executing and delivering a counterpart signature page to each of the Transaction Agreements. PFM, Ridgeback, and Farallon each hereby acknowledges and agrees that the existing holders of the Preferred Stock and those potential purchasers listed on Schedule 1 to this Agreement shall be deemed to have been approved by each of such entities for purposes of the preceding sentence. Exhibit A to this Agreement shall be updated to reflect the number of Additional Shares purchased at each such Closing and the parties purchasing such Additional Shares.

1.4 Use of Proceeds. In accordance with the directions of the Company's Board of Directors (the "**Board**"), the Company will use the proceeds from the sale of the Shares for general working capital purposes.

1.5 Defined Terms Used in this Agreement. In addition to the terms defined above, the following terms used in this Agreement shall be construed to have the meanings set forth or referenced below.

(a) "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, limited partner, member, manager, managing member, employee, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or is under common investment management with or shares the same management company with, such Person. For purposes of this definition, the term "control" when used with respect to any Person shall mean the power to direct the management or policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise, and the terms "controlling" and "controlled" shall have meanings correlative to the foregoing.

(b) "**Code**" means the Internal Revenue Code of 1986, as amended.

(c) "**Company Covered Person**" means, with respect to the Company as an "issuer" for purposes of Rule 506 promulgated under the Securities Act, any Person listed in the first paragraph of Rule 506(d)(1).

(d) "**Company Intellectual Property**" means all patents, patent applications, trademarks, trademark applications, service marks, service mark applications, tradenames, copyrights, trade secrets, know-how, domain names, mask works, information and proprietary rights and processes, similar or other intellectual property rights, subject matter of any of the foregoing, tangible embodiments of any of the foregoing, and any and all such cases that are owned by the Company and used in the business as now conducted and as presently proposed to be conducted, including without limitation with respect to Company's research and development activities.

(e) "**Indemnification Agreement**" means the form agreement between the Company and its directors, substantially in the form of Exhibit H attached to this Agreement.

(f) "**Investors' Rights Agreement**" means the Second Amended and Restated Investors' Rights Agreement among the Company, the Purchasers and certain other stockholders of the Company, dated as of the date of the Initial Closing, substantially in the form of Exhibit D attached to this Agreement.

(g) "**Key Employee**" means any officer, senior vice-president, and vice president of the Company.

(h) "**knowledge**" or "**to the Company's knowledge**" or "**to the knowledge of the Company**" means (a) the actual knowledge of Rachel E. Haurwitz, Ph.D. (President and Chief Executive Officer), Steven Kanner, Ph.D. (Chief Scientific Officer), Barbara G. McClung, J.D. (Chief Legal Officer), Jason O'Byrne (Chief Financial Officer) and Cherry Thomas (SVP of Clinical Development), (b) such knowledge that could be obtained by such individuals from a reasonable investigation of the documents (whether written or electronic, including electronic mails sent to or by such individual) in the Company's possession and of the individuals generally responsible at the Company for the subject matter to which knowledge is pertinent, or (c) receipt of actual notice by such individual that conveys the matter in respect of which knowledge is pertinent.

(i) "**Lead Investors**" means, collectively, PFM Healthcare Master Fund, L.P. ("**PFM")**, Zone III Healthcare Holdings, LLC ("**Farallon**"), and RIDGEBACK CAPITAL INVESTMENTS LP ("**Ridgeback**")].

(j) "**made available**" means that the applicable document or other disclosure item has been uploaded to the Company's electronic data room for review by the Lead Investors or made available to the other Purchasers upon request from such Purchaser through access to the Company's electronic data room.

(k) "**Material Adverse Effect**" means a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property, or results of operations of the Company.

(l) "**Management Rights Letter(s)**" means the agreement between the Company and each Purchaser requesting such an agreement, dated as of the date of the applicable Closing.

(m) "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

(n) "**Purchaser**" means each of the Purchasers who is initially a party to this Agreement and any Additional Purchaser who becomes a party to this Agreement at a subsequent Closing under Section 1.3.

(o) "**Right of First Refusal and Co-Sale Agreement**" means the Second Amended and Restated Right of First Refusal and Co-Sale Agreement among the Company, the Purchasers, and certain other stockholders of the Company, dated as of the date of the Initial Closing, substantially in the form of Exhibit E attached to this Agreement.

(p) "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(q) "**Transaction Agreements**" means this Agreement, the Investors' Rights Agreement, the Right of First Refusal and Co-Sale Agreement, the Voting Agreement and the Management Rights Letter(s).

(r) "**Voting Agreement**" means the Third Amended and Restated Voting Agreement among the Company, the Purchasers and certain other stockholders of the Company, dated as of the date of the Initial Closing, substantially in the form of Exhibit F attached to this Agreement.

2. Representations and Warranties of the Company. The Company hereby represents and warrants to each Purchaser that, except as set forth on the Disclosure Schedule attached as Exhibit C to this Agreement (the "**Disclosure Schedule**"), which exceptions shall be deemed to be part of the representations and warranties made hereunder, the following representations are true and complete as of the date of the Initial Closing, except as otherwise indicated. The Disclosure Schedule shall be arranged in sections corresponding to the numbered and lettered sections contained in this Section 2, and the disclosures in any section of the Disclosure Schedule shall qualify other sections in this Section 2 only to the extent it is readily apparent from a reading of the disclosure that such disclosure is applicable to such other sections.

For purposes of these representations and warranties (other than those in Sections 2.2, 2.3, 2.4, 2.5 and 2.6), the term the "**Company**" shall include any subsidiaries of the Company, unless otherwise noted herein.

2.1 Organization, Good Standing, Corporate Power and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as presently conducted and as presently proposed to be conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a Material Adverse Effect.

2.2 Capitalization.

(a) The authorized capital of the Company consists, immediately prior to the Initial Closing, of:

(i) 24,500,000 shares of common stock, $0.0001 par value per share (the "**Common Stock**"), 5,481,498 shares of which are issued and outstanding immediately prior to the Initial Closing. All of the outstanding shares of Common Stock have been duly authorized, are fully paid and nonassessable and were issued in compliance with all applicable federal and state securities laws. The Company holds no Common Stock in its treasury.

(ii) 14,430,622 shares of preferred stock, $0.0001 par value per share (the "**Preferred Stock**"), of which (A) 1,576,342 shares have been designated Series A Preferred Stock, all of which are issued and outstanding immediately prior to the Initial Closing, (B) 3,004,124 shares have been designated Series A-1

Preferred Stock, all of which are issued and outstanding immediately prior to the Initial Closing, (C) 3,186,116 shares have been designated Series B Preferred Stock, all of which are issued and outstanding immediately prior to the Initial Closing, and (D) 6,664,040 shares have been designated Series C Preferred Stock, none of which are issued or outstanding immediately prior to the Initial Closing. The rights, privileges and preferences of the Preferred Stock are as stated in the Restated Certificate and as provided by the Delaware General Corporation Law (the "**DGCL**"). The Company holds no Preferred Stock in its treasury.

(b) The Company has reserved up to 5,475,493 shares of Common Stock for issuance to officers, directors, employees and consultants of the Company pursuant to its 2013 Equity Incentive Plan (the "**2013 Stock Plan**") plus up to 250,000 shares of Common Stock subject to stock options or similar awards granted under the Company's terminated 2012 Stock Option/Stock Issuance Plan (the "**2012 Stock Plan**") that expire or otherwise terminate without having been exercised in full and shares issued pursuant to awards granted under the 2012 Stock Plan that are forfeited to or repurchased by the Company. The 2013 Stock Plan has been duly adopted by the Board and approved by the Company's stockholders. Of such reserved shares of Common Stock, 422,529 shares have been issued pursuant to restricted stock purchase agreements which are fully vested, options to purchase 2,332,845 shares have been granted and are currently outstanding (including options to purchase 250,000 shares issued under the 2012 Stock Plan), 1,166,503 shares of Common Stock have been issued upon the exercise of fully vested options, and up to 1,803,616 shares of Common Stock remain available for issuance to officers, directors, employees, and consultants pursuant to the 2013 Stock Plan. The Company has made available to the Purchasers complete and accurate copies of the 2013 Stock Plan and forms of agreements used thereunder.

(c) Section 2.2(c) of the Disclosure Schedule sets forth the capitalization of the Company immediately following the Initial Closing including the number of shares of the following: (i) issued and outstanding Common Stock including, with respect to restricted Common Stock, vesting schedule and repurchase price; (ii) granted stock options including vesting schedule and exercise price; (iii) shares of Common Stock reserved for future award grants under the 2013 Stock Plan; (iv) each series of Preferred Stock; and (v) warrants or stock purchase rights, if any. Except for (A) the conversion privileges of the Preferred Stock, (B) the rights provided in Section 4 of the Investors' Rights Agreement, and (C) the securities and rights described in Section 2.2(b) of this Agreement and Section 2.2(c) of the Disclosure Schedule, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, to purchase or acquire from the Company any shares of Common Stock or Preferred Stock, or any securities convertible into or exchangeable for shares of Common Stock or Preferred Stock. All outstanding shares of the Company's Common Stock and all shares of the Company's Common Stock underlying outstanding options are subject to (x) a right of first refusal in favor of the Company upon any proposed transfer (other than transfers for estate planning purposes); and (y) a lock-up or market standoff agreement of not less than one hundred eighty (180) days following the Company's initial public offering pursuant to a registration statement filed with the Securities and Exchange Commission under the Securities Act.

(d) Except as set forth on Section 2.2(d) of the Disclosure Schedule, none of the Company's stock purchase agreements or stock option documents contains a provision for acceleration of vesting (or lapse of a repurchase right) or other changes in the vesting provisions or other terms of such agreement or understanding upon the occurrence of any event or combination of events, including without limitation in the case where the 2013 Stock Plan is not assumed in an acquisition. The Company has never adjusted or amended the exercise price of any stock options previously awarded, whether through amendment, cancellation, replacement grant, repricing, or any other means. Except as set forth in the Restated Certificate, the Company has no obligation (contingent or otherwise) to purchase or redeem any of its capital stock.

(e) The Company believes in good faith that any "nonqualified deferred compensation plan" (as such term is defined under Section 409A(d)(1) of the Code and the guidance thereunder) under which the Company makes, is obligated to make or promises to make, payments (each, a "**409A Plan**") complies in all material respects, in both form and substance, with the requirements of Section 409A of the Code and the guidance thereunder. To the knowledge of the Company, no payment to be made under any 409A Plan is, or will be, subject to the penalties of Section 409A(a)(1) of the Code.

(f) Each series of Preferred Stock is convertible into Common Stock on a one-for-one basis as of the date hereof, and the consummation of the transactions contemplated hereunder will not result in any anti-dilution adjustment or other similar adjustment to the outstanding shares of Preferred Stock.

(g) The Company has obtained valid waivers of any rights by or binding upon other parties to purchase any of the Shares covered by this Agreement.

2.3 Subsidiaries. Except as set forth in Section 2.3 of the Disclosure Schedule, the Company does not currently own or control, directly or indirectly, any interest in any other corporation, partnership, trust, joint venture, limited liability company, association, or other business entity. The Company is not a participant in any joint venture, partnership or similar arrangement.

2.4 Authorization. All corporate action required to be taken by the Board and the stockholders of the Company in order to authorize the Company to enter into the Transaction Agreements, and to issue the Shares at each Closing and the Common Stock issuable upon conversion of the Shares, has been taken or will be taken prior to the Initial Closing. All action on the part of the officers of the Company necessary for the execution and delivery of the Transaction Agreements, the performance of all obligations of the Company under the Transaction Agreements to be performed as of such Closing, and the issuance and delivery of the Shares has been taken or will be taken prior to such Closing. The Transaction Agreements, when executed and delivered by the Company, shall constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, or (iii) to the extent the indemnification provisions contained in the Investors' Rights Agreement, the Indemnification Agreement(s) and any other indemnification agreement between the Company and its directors may be limited by applicable federal or state securities laws.

2.5 Valid Issuance of Shares. The Shares, when issued, sold and delivered in accordance with the terms and for the consideration set forth in this Agreement, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable state and federal securities laws and liens or encumbrances created by or imposed by a Purchaser. Assuming the accuracy of the representations of the Purchasers in Section 3 of this Agreement and subject to the filings described in Section 2.6(ii) below, the Shares will be issued in compliance with all applicable federal and state securities laws. The Common Stock issuable upon conversion of the Shares has been duly reserved for issuance, and upon issuance in accordance with the terms of the Restated Certificate, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable federal and state securities laws and liens or encumbrances created by or imposed by a Purchaser. Based in part upon the representations of the Purchasers in Section 3 of this Agreement, and subject to Section 2.6 below, the Common Stock issuable upon conversion of the Shares will be issued in compliance with all applicable federal and state securities laws.

2.6 Governmental Consents and Filings. Assuming the accuracy of the representations made by the Purchasers in Section 3 of this Agreement, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required on the part of the Company in connection with the consummation of the transactions contemplated by this Agreement, except for (i) the filing of the Restated Certificate, which will have been filed as of the Initial Closing, and (ii) filings pursuant to Regulation D of the Securities Act, and applicable state securities laws, which have been made or will be made in a timely manner.

2.7 Litigation. Except as set forth in Section 2.7 of the Disclosure Schedule, there is no claim, action, suit, proceeding, arbitration, complaint, charge or investigation pending or, to the Company's knowledge, currently threatened (i) against the Company or any officer or director or Key Employee of the Company arising out of their employment or board relationship with the Company; (ii) that questions the validity of the Transaction Agreements or the right of the Company to enter into them, or to consummate the transactions contemplated by the Transaction Agreements; or (iii) against the Company or, to the Company's knowledge, any Key Employee that would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect. Neither the

Company nor, to the Company's knowledge, any of its officers or directors or Key Employees, is a party or is named as subject to the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality (in the case of officers and directors or Key Employees, such as would affect the Company). There is no action, suit, proceeding, or investigation by the Company pending or which the Company intends to initiate. The foregoing includes, without limitation, actions, suits, proceedings, or investigations pending or threatened in writing (or any basis therefor known to the Company) involving the prior employment of any of the Company's employees, their services provided in connection with the Company's business, any information or techniques allegedly proprietary to any of their former employers, or their obligations under any agreements with prior employers.

2.8 Intellectual Property.

(a) Section 2.8(a) of the Disclosure Schedule lists all patents and patent applications owned by the Company, and all Company trademarks, trademark applications, service marks, service mark applications, domain names, and trade names. There is no fact or circumstance that would cause the Company to reasonably conclude that any of the Company Intellectual Property is invalid or unenforceable. None of the Company Intellectual Property is currently involved in any interference, reissue, re-examination, inter-partes review, cancellation, or opposition proceeding anywhere in the world, and the Company has not received any written notice from any Person of such actual or threatened proceeding.

(b) Each employee and consultant has assigned to the Company all intellectual property rights that are related to the Company's business as now conducted and as presently proposed to be conducted and all intellectual property rights that he, she, it or they solely or jointly conceived, reduced to practice, developed or made during the period of his, her, its, or their employment or consulting relationship with the Company that (i) relate, at the time of conception, reduction to practice, development, or making of such intellectual property right, to the Company's business as then conducted or as then proposed to be conducted, (ii) were developed on any amount of the Company's time or with the use of any of the Company's equipment, supplies, facilities, or information or (iii) resulted from the performance of services for the Company. To the Company's knowledge, it will not be necessary to use any inventions of any of its employees or consultants made prior to their employment by the Company to conduct the Company's business as now conducted and as proposed to be conducted. The Company owns all Company Intellectual Property through assignments from employees, consultants, other companies, or universities.

(c) Section 2.8(c) of the Disclosure Schedule sets forth a true and accurate list of all intellectual property licenses to which the Company is a party. All such licenses are in full force and effect and neither the Company nor, to the Company's knowledge, any other party thereto, is in default with respect to any material obligation thereunder.

(d) The Company has not received any communications alleging that the Company has violated, or by conducting its business, would violate any of the patents, trademarks, service marks, trade names, copyrights, trade secrets, mask works, or other proprietary rights or processes of any other Person. The Company has obtained and possesses valid licenses to use all of the software programs present on the computers and other software-enabled electronic devices that it owns or leases or that it has otherwise provided to its employees for their use in connection with the Company's business.

(e) The Company has not embedded, used or distributed any open source, copyleft or community source code (including but not limited to any libraries or code, software, technologies or other materials that are licensed or distributed under any General Public License, Lesser General Public License or similar license arrangement or other distribution model described by the Open Source Initiative at www.opensource.org, collectively "**Open Source Software**") in connection with any of its products or services that are generally available or in development in any manner that would materially restrict the ability of the Company to protect its proprietary interests in any such product or service or in any manner that requires, or purports to require (i) any Company IP (other than the Open Source Software itself) be disclosed or distributed in source code form or be licensed for the purpose of making derivative works; (ii) any restriction on the consideration to be charged for the distribution of any Company IP; (iii) the creation of any obligation for the Company with respect to Company IP owned by the Company, or the grant to any third party of any rights or immunities under Company IP owned by the Company; or (iv) any other limitation, restriction or condition on the right of the Company with respect to its use or distribution of any Company IP.

(f) No Person who was involved in, or who contributed to, the creation or development of any Company Intellectual Property, has performed services for the government, university, college, or other educational institution or research center in a manner that would affect Company's rights in Company Intellectual Property that relates to the Company's business as now conducted or as presently proposed to be conducted.

2.9 Compliance with Other Instruments. The Company is not in violation or default (i) of any provisions of its Restated Certificate or Bylaws, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound that is required to be listed on the Disclosure Schedule, or (v) to its Knowledge, of any provision of federal or state statute, rule or regulation applicable to the Company, the violation of which would have a Material Adverse Effect. The execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated by the Transaction Agreements will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (x) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement; or (y) an event which results in the creation of any lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to the Company.

2.10 Agreements; Actions.

(a) Except for the Transaction Agreements and as set forth on Section 2.10(a) of the Disclosure Schedule, there are no (1) agreements or understandings, (2) instruments, (3) contracts or (4) proposed transactions memorialized in an executed term sheet or executed letter of intent to which the Company is a party or by which it is bound that involve (i) payment obligations of, or payments to, the Company in excess of $250,000 (other than those agreements, understanding, instruments, contracts or the like disclosed under clauses (ii) through (iv) of this Section 2.10(a)), other than those which were entered into in the ordinary course of the Company's business, (ii) licenses of any patent, copyright, trademark, trade secret or other proprietary right to or from the Company, (iii) the grant of rights to manufacture, produce, assemble, license, market, or sell its products to any other Person that limit the Company's exclusive right to develop, manufacture, assemble, distribute, market or sell its products, or (iv) indemnification by the Company not in the ordinary course of business with respect to infringements of proprietary rights.

(b) Except as set forth on Section 2.10(b) of the Disclosure Schedule, the Company has not (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or incurred any other liabilities that, under GAAP, would be required to be reflected on a balance sheet but which are not reflected in the December 31, 2020 consolidated balance sheet contained within the Financial Statements (except for liabilities incurred in the ordinary course of business since December 31, 2020), which indebtedness or other liabilities individually are in excess of $100,000 or are in excess of $250,000 in the aggregate (which indebtedness or liabilities are currently outstanding), (iii) made any loans or advances to any Person, other than ordinary advances for business expenses, or (iv) sold, exchanged or otherwise disposed of any of its assets or rights, other than the sale of its equipment and materials in the ordinary course of business. For the purposes of this subsection (b) and subsection (c) of this Section 2.10, all (1) indebtedness, (2) liabilities, (3) agreements, (4) understandings, (5) instruments, (6) contracts and (7) proposed transactions memorialized in an executed term sheet or letter of intent involving the same Person (including Persons the Company has reason to believe are affiliated with each other) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(c) The Company is not a guarantor or indemnitor of any indebtedness of any other Person.

2.11 Certain Transactions.

(a) Other than (i) standard employee benefits generally available to all employees, (ii) standard director and officer indemnification agreements approved by the Board, (iii) the purchase of shares of the Company's capital stock and the issuance of options to purchase shares of the Company's Common Stock, in each instance, approved by the Board at a duly called meeting thereof, or by unanimous written consent, and (iv) agreements disclosed on Section 2.11(a) of the Disclosure Schedule, there are (A) no agreements, understandings or proposed transactions between the Company and any of its current officers, directors, or Key Employees, or any Affiliate thereof, and (B) no agreements, understandings or proposed transactions of a commercial or financial nature between the Company and any of its former officers, directors, or Key Employees.

(b) The Company is not indebted, directly or indirectly, to any of its directors, officers or employees or to their respective spouses or children or to any Affiliate of any of the foregoing, other than in connection with expenses or advances of expenses incurred in the ordinary course of business or employee relocation expenses and for other customary employee benefits made generally available to all employees. Except as set forth on Section 2.11(b) of the Disclosure Schedule, none of the Company's directors, officers or employees, or any members of their immediate families, or any Affiliate of the foregoing is, directly or indirectly, indebted to the Company or, to the Company's knowledge, have any (i) material commercial, industrial, banking, consulting, legal, accounting, charitable or familial relationship with any of the Company's customers, suppliers, service providers, joint venture partners, licensees and competitors; (ii) direct or indirect ownership interest in any firm or corporation with which the Company is affiliated or with which the Company has a business relationship, or any firm or corporation which competes with the Company except that directors, officers, employees or stockholders of the Company may own stock in (but not exceeding two percent (2%) of the outstanding capital stock of) publicly traded companies that may compete with the Company; or (iii) financial interest in any material contract with the Company.

2.12 Rights of Registration and Voting Rights. Except as provided in the Investors' Rights Agreement, the Company is not under any obligation to register under the Securities Act any of its currently outstanding securities or any securities issuable upon exercise or conversion of its currently outstanding securities. To the Company's knowledge, except as contemplated in the Voting Agreement, no stockholder of the Company has entered into any agreements with respect to the voting of capital shares of the Company.

2.13 Property. The property and assets that the Company owns are free and clear of all mortgages, deeds of trust, liens, loans and encumbrances, except for statutory liens for the payment of current taxes that are not yet delinquent and encumbrances and liens that arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets. With respect to the property and assets it leases, the Company is in compliance with such leases and, to its Knowledge, holds a valid leasehold interest free of any liens, claims or encumbrances other than those of the lessors of such property or assets. The Company does not own any real property.

2.14 Financial Statements. Section 2.14 of the Disclosure Schedule sets forth a copy of the Company's audited consolidated financial statements (including a consolidated balance sheet, statement of operations and comprehensive loss and statement of cash flows) for the fiscal year ended December 31, 2019 and its unaudited consolidated financial statements (including a consolidated balance sheet, statement of operations and statement of cash flows) for the fiscal year ended December 31, 2020 (collectively, the "**Financial Statements**"). The Financial Statements have been prepared in accordance with generally accepted accounting principles ("**GAAP**") applied on a consistent basis throughout the periods indicated, except that the unaudited Financial Statements do not contain footnotes or certain other presentation related items, in either case required by GAAP. The Financial Statements fairly present in all material respects the financial condition and operating results of the Company as of the dates, and for the periods, indicated therein, subject in the case of the unaudited Financial Statements to the tax provision and to year-end audit adjustments that would not have a Material Adverse Effect. Except as set forth in the Financial Statements, the Company has no material liabilities or obligations, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to December 31, 2020; (ii) obligations under contracts and commitments incurred in the ordinary course of business; and (iii) liabilities and obligations of a type or nature not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in all such cases, individually and in the aggregate would not have a Material Adverse Effect.

2.15 Changes. Except as set forth in Section 2.15 of the Disclosure Schedule, since December 31, 2020, there has not been:

(a) any change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the Financial Statements, except changes in the ordinary course of business that have not caused, in the aggregate, a Material Adverse Effect;

(b) any damage, destruction or loss, whether or not covered by insurance, that would have a Material Adverse Effect;

(c) any affirmative waiver or compromise by the Company of a material right or any waiver or compromise by the Company of material debt owed to it;

(d) any satisfaction or discharge of any material lien, claim, encumbrance or payment of any material obligation by the Company, except in the ordinary course of business;

(e) any material change to a material contract or agreement by which the Company or any of its assets is bound or subject;

(f) any material change in any compensation arrangement or agreement with any employee, officer, director or stockholder;

(g) any resignation or termination of employment of any Key Employee of the Company;

(h) any mortgage, pledge, transfer of a security interest in, or lien, created by the Company, with respect to any of its material properties or assets, except liens for taxes not yet due or payable and liens that arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets;

(i) any loans or guarantees made by the Company to or for the benefit of its employees, officers or directors, or any members of their immediate families, other than travel advances and other advances made in the ordinary course of its business;

(j) any declaration, setting aside or payment or other distribution in respect of any of the Company's capital stock, or any direct or indirect redemption, purchase, or other acquisition of any of such stock by the Company;

(k) any sale, assignment or transfer of any Company Intellectual Property that could reasonably be expected to result in a Material Adverse Effect;

(l) receipt of notice that there has been a loss of, or material order cancellation by, any major customer of the Company;

(m) to the Company's knowledge, any other event or condition of any character related to the Company, other than events affecting the economy or the Company's industry generally, that could reasonably be expected to result in a Material Adverse Effect; or

(n) any arrangement or commitment by the Company to do any of the things described in this Section 2.15.

2.16 Employee Matters.

(a) To the Company's knowledge, none of its employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with such employee's ability to promote the interest of the Company or that would conflict with the Company's business. Neither the execution or delivery of the Transaction Agreements, nor the carrying on of the Company's business by the employees of the Company, nor the conduct of the Company's business as now conducted and as presently proposed to be conducted, will, to the Company's knowledge, conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated.

(b) The Company is not delinquent in payments to any of its employees, consultants, or independent contractors for any wages, salaries, commissions, bonuses, or other direct compensation for any service performed for it to the date hereof or amounts required to be reimbursed to such employees, consultants or independent contractors. The Company has complied in all material respects with all applicable state and federal equal employment opportunity laws and with other laws related to employment, including those related to wages, hours, worker classification and collective bargaining. The Company has withheld and paid to the appropriate governmental entity or is holding for payment not yet due to such governmental entity all amounts required to be withheld from employees of the Company and is not liable for any arrears of wages, taxes, penalties or other sums for failure to comply with any of the foregoing.

(c) To the Company's knowledge, no Key Employee intends to terminate employment with the Company, nor does the Company have a present intention to terminate the employment of any of the foregoing. The employment of each employee of the Company is terminable at the will of the Company. Except as set forth in Section 2.16(c) of the Disclosure Schedule or as required by law, upon termination of the employment of any such employees, no severance or other payments will become due.

(d) The Company has not made any representations regarding equity incentives to any officer, employee, director or consultant that are inconsistent with the share amounts and terms set forth in the minutes of meetings of the Board.

(e) Since December 31, 2020, the Company has not terminated any Key Employees.

(f) Section 2.16(f) of the Disclosure Schedule sets forth each employee benefit plan maintained, established or sponsored by the Company, or which the Company participates in or contributes to, which is subject to the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"). The Company has made all required contributions and has no liability to any such employee benefit plan, other than liability for health plan continuation coverage described in Part 6 of Title I(B) of ERISA, and has complied in all material respects with all applicable laws for any such employee benefit plan.

(g) To the Company's knowledge, none of the officers or directors of the Company has been (a) subject to voluntary or involuntary petition under the federal bankruptcy laws or any state insolvency law or the appointment of a receiver, fiscal agent or similar officer by a court for his business or property; (b) convicted in a criminal proceeding or named as a subject of a pending criminal proceeding (excluding traffic violations and other minor offenses); (c) subject to any order, judgment or decree (not subsequently reversed, suspended, or vacated) of any court of competent jurisdiction permanently or temporarily enjoining him from engaging, or otherwise imposing limits or conditions on his engagement in any securities, investment advisory, banking, insurance, or other type of business or acting as an officer or director of a public company; or (d) found by a court of competent jurisdiction in a civil action or by the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated any federal or state securities, commodities, or unfair trade practices law, which such judgment or finding has not been subsequently reversed, suspended, or vacated.

2.17 Tax Returns and Payments. There are no federal, state, county, local or foreign taxes due and payable by the Company which have not been timely paid. There are no accrued and unpaid federal, state, county, local or foreign taxes of the Company which are due, whether or not assessed or disputed. There have been no

examinations or audits of any tax returns or reports by any applicable federal, state, local or foreign governmental agency. The Company has duly and timely filed all federal, state, county, local and foreign tax returns required to have been filed by it and there are in effect no waivers of applicable statutes of limitations with respect to taxes for any year.

2.18 Insurance. The Company has in full force and effect such insurance policies with extended coverage, sufficient in amount (subject to reasonable deductions) to allow it to replace any of its material assets that might be damaged or destroyed.

2.19 Employee Agreements. Each current and former employee, consultant and officer of the Company has executed an agreement with the Company regarding confidential information and invention assignments substantially in the form or forms delivered to the counsel for the Purchasers (the "**Confidential Information Agreements**"). Except as set forth in Section 2.19 of the Disclosure Schedule, no current or former Key Employee or any current employee has excluded any works or inventions from his or her assignment of inventions to the Company pursuant to such employee's Confidential Information Agreement. To the Company's knowledge, none of its employees is in violation of any agreement covered by this Section 2.19.

2.20 Permits. The Company has all material franchises, permits, licenses and any similar authority necessary for the conduct of its business. The Company is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

2.21 Corporate Documents. The Restated Certificate and Bylaws of the Company are in the form made available to the Purchasers. The copy of the minute books of the Company made available to the Purchasers contains minutes of all meetings of directors and stockholders and all actions by written consent without a meeting by the directors and stockholders since the date of incorporation and accurately reflects in all material respects all actions by the directors (and any committee of directors) and stockholders of the Company.

2.22 83(b) Elections. To the Company's knowledge, all elections and notices under Section 83(b) of the Code have been or will be timely filed by all individuals who have acquired unvested shares of the Company's Common Stock.

2.23 Environmental and Safety Laws. To its knowledge (a) the Company is and has been in material compliance with all Environmental Laws (as defined below); (b) the Company has not caused a material release or threatened material release of any pollutant, contaminant or toxic or hazardous material, substance or waste or petroleum or any fraction thereof (each a "**Hazardous Substance**"), on, upon, into or from any site currently or heretofore leased or otherwise used by the Company; (c) there have been no Hazardous Substances generated by the Company that have been disposed of or come to rest at any site that has been included in any published U.S. federal, state or local "superfund" site list or any other similar list of hazardous or toxic waste sites published by any governmental authority in the United States; (d) there are no underground storage tanks or polychlorinated biphenyls ("**PCBs**") or PCB-containing equipment on any site currently leased by the Company or otherwise used by the Company; and (e) there is no hazardous waste as defined by the Resource Conservation and Recovery Act, as amended, stored by the Company on any site currently leased or otherwise used by the Company, except in compliance with Environmental Laws. The Company has made available to the Purchasers true and complete copies of all material environmental records, reports, notifications, certificates of need, permits, pending permit applications, correspondence, engineering studies and environmental studies or assessments. For purposes of this Section 2.23, "**Environmental Laws**" means any applicable law, regulation, or other requirement relating to (i) releases or the threatened release of a Hazardous Substance; (ii) pollution or protection of human health and the environment; or (iii) the manufacture, handling, transport, use, treatment, storage, or disposal of Hazardous Substances.

2.24 Foreign Corrupt Practices Act. Neither the Company nor any of its directors, officers, or, to the Company's knowledge, any of its employees or agents have, directly or indirectly, made, offered, promised or authorized any payment or gift of any money or anything of value to or for the benefit of any "foreign official" (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "**FCPA**")), foreign political party or official thereof or candidate for foreign political office for the purpose of (i) influencing any official act or decision of such official, party or candidate, (ii) inducing such official, party or candidate to use his, her or its influence to affect any act or decision of a foreign governmental authority, or (iii) securing any improper advantage, in the case of (i), (ii)

and (iii) above in order to assist the Company or any of its affiliates in obtaining or retaining business for or with, or directing business to, any person. Neither the Company nor any of its directors, officers, employees or agents have made or authorized any bribe, rebate, payoff, influence payment, kickback or other unlawful payment of funds or received or retained any funds in violation of any law, rule or regulation. Neither the Company nor, to the Company's knowledge, any of its officers, directors or employees are the subject of any allegation, voluntary disclosure, investigation, prosecution or other enforcement action related to the FCPA or any other anti-corruption law (collectively, "**Enforcement Action**").

2.25 Data Privacy. In connection with its collection, storage, use and/or disclosure of any information that constitutes "personal information," "personal data" or "personally identifiable information" as defined in applicable laws (collectively "**Personal Information**") by or on behalf of the Company, the Company is and has been, to the Company's knowledge, in compliance in all material respects with (i) all applicable laws (including, without limitation, laws relating to privacy, data security, telephone and text message communications, and marketing by email or other channels) in all relevant jurisdictions, (ii) the Company's privacy policies, and (iii) the requirements of any contract codes of conduct or industry standards by which the Company is bound. The Company maintains and has maintained reasonable physical, technical, and administrative security measures and policies designed to protect all Personal Information owned, stored, used, maintained or controlled by or on behalf of the Company from and against unlawful, accidental or unauthorized access, destruction, loss, use, modification and/or disclosure. To the extent the Company maintains or transmits protected health information, as defined under 45 C.F.R. § 160.103, the Company is in compliance in all material respects with the applicable requirements of the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, including all rules and regulations promulgated thereunder. The Company is and has been, to the Company's knowledge, in compliance in all material respects with all laws relating to data loss, theft and breach of security notification obligations. To the Company's knowledge, there has been no occurrence of (x) unlawful, accidental or unauthorized destruction, loss, use, modification or disclosure of or access to Personal Information owned, stored, used, maintained or controlled by or on behalf of the Company such that Privacy Requirements require or required the Company to notify government authorities, affected individuals or other parties of such occurrence or (y) unauthorized access to or disclosure of the Company's confidential information or trade secrets that reasonably would be expected to result in a Material Adverse Effect.

2.26 Preclinical Development and Clinical Trials. The studies, tests, preclinical development and clinical trials, if any, conducted by or on behalf of the Company are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional and scientific standards for products or product candidates comparable to those being developed by the Company and all applicable laws and regulations, including the Federal Food, Drug, and Cosmetic Act and 21 C.F.R. parts 50, 54, 56, 58, 312, and, if applicable, 812. The descriptions of, protocols for, and data and other results of, the studies, tests, development and trials conducted by or on behalf of the Company that have been made available to the Purchasers are accurate and complete. The Company is not aware of any studies, tests, development or trials the results of which reasonably call into question the results of the studies, tests, development and trials conducted by or on behalf of the Company, and the Company has not received any notices or correspondence from the U.S. Food and Drug Administration ("**FDA**") or any other governmental entity or any institutional review board or comparable authority requiring the termination, suspension or material modification of any studies, tests, preclinical development or clinical trials conducted by or on behalf of the Company.

2.27 Regulatory Approvals. The Company possesses all permits, licenses, registrations, certificates, authorizations, orders, and approvals from the appropriate federal, state, local, or foreign regulatory authorities necessary to conduct its business, including all such permits, licenses, registrations, certificates, authorizations, orders, and approvals required by the FDA or any other federal, state, local, or foreign agencies or bodies engaged in the regulation of drugs, biologics, or medical devices. The Company has not received any notice of proceedings relating to the suspension, modification, revocation, or cancellation of any such permit, license, registration, certificate, authorization, order or approval. Neither the Company nor, to the Company's knowledge, any officer, employee or independent contractor of the Company or any agent having the actual authority to bind the Company (such agent is referred to in this Section 2.27 as "**Agent**") has been convicted of any crime or engaged in any conduct that has previously caused or would reasonably be expected to result in (A) disqualification or debarment by the FDA under 21 U.S.C. Sections 335(a) or (b), or any similar law, rule, or regulation of any other governmental entities, (B) debarment, suspension, or exclusion under any federal healthcare programs or by the General Services

Administration, or (C) exclusion under 42 U.S.C. Section 1320a-7 or any similar law, rule, or regulation of any governmental entities. Neither the Company nor any of its officers or employees, or, to the Company's knowledge, any of the Company's independent contractors or Agents or any of its manufacturing or clinical service providers, is the subject of any pending or, to the Company's knowledge, threatened investigation by FDA pursuant to its "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" policy as stated at 56 Fed. Reg. 46191 (September 10, 1991) (the "**FDA Application Integrity Policy**") and any amendments thereto, or by any other similar governmental entity pursuant to any similar policy. Neither the Company nor any of its officers or employees, or, to the Company's knowledge, any of the Company's independent contractors or Agents or any its manufacturing or clinical service providers, has committed any act, made any statement, or failed to make any statement, in each case with respect to the Company, that would reasonably be expected to provide a basis for FDA to invoke the FDA Application Integrity Policy or for any similar governmental entity to invoke a similar policy. Neither the Company nor any of its officers or employees, or, to the Company's knowledge, any of the Company's independent contractors or Agents or any of its manufacturing or clinical service providers, has made on behalf of the Company any materially false statements on, or material omissions from, any notifications, applications, approvals, reports, and other submissions to FDA or any similar governmental entity.

2.28 FDA Regulation. The Company is and has been in compliance with all applicable laws administered or issued by the FDA or any similar governmental entity, including the Federal Food, Drug, and Cosmetic Act and all other laws regarding developing, testing, manufacturing, marketing, distributing or promoting the products of the Company, or complaint handling or adverse event reporting.

2.29 Disclosure. The Company has made available to the Purchasers, at least three (3) business days prior to the Initial Closing (provided that the request therefor was received by the Company at least four (4) business days prior to the Initial Closing), all the information reasonably available to the Company that the Purchasers have requested for deciding whether to acquire the Shares, except for certain private, proprietary, or confidential personal information. No representation or warranty of the Company contained in this Agreement, as qualified by the Disclosure Schedule, and no certificate furnished or to be furnished to Purchasers at the Initial Closing contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained herein or therein not misleading in light of the circumstances under which they were made. It is understood that this representation is qualified by the fact that the Company has not delivered to the Purchasers, and has not been requested to deliver, a private placement or similar memorandum or any written disclosure of the types of information customarily furnished to purchasers of securities.

2.30 No Disqualification Events. The Company has exercised reasonable care to determine whether any Company Covered Person (as defined below) is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities Act (a "**Disqualification Event**"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has made available to the Purchasers a copy of any disclosures provided thereunder. "**Company Covered Person**" shall mean (i) the Company, (ii) any of its predecessors, (iii) any affiliated issuer, (iv) any director, executive officer, or other officer of the Company who is also a Purchaser hereunder, (v) any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, and (v) any promoter (as that term is defined in Rule 405 under the Securities Act) connected with the Company in any capacity at the Initial Closing.

3. Representations and Warranties of the Purchasers. Each Purchaser hereby represents and warrants to the Company, severally and not jointly, that:

3.1 Authorization. The Purchaser has full power and authority to enter into the Transaction Agreements. The Transaction Agreements to which the Purchaser is a party, when executed and delivered by the Purchaser, will constitute valid and legally binding obligations of the Purchaser, enforceable against the Purchaser in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance and any other laws of general application affecting enforcement of creditors' rights generally, and as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies, or (b) to the extent the indemnification provisions contained in the Investors' Rights Agreement may be limited by applicable federal or state securities laws.

3.2 Purchase Entirely for Own Account. This Agreement is made with the Purchaser in reliance upon the Purchaser's representation to the Company, which by the Purchaser's execution of this Agreement, the Purchaser hereby confirms, that the Shares to be acquired by the Purchaser will be acquired for investment for the Purchaser's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same. By executing this Agreement, the Purchaser further represents that the Purchaser does not presently have any contract, undertaking, agreement or arrangement with any Person to sell, transfer or grant participations to such Person or to any third Person, with respect to any of the Shares. The Purchaser has not been formed for the specific purpose of acquiring the Shares.

3.3 Disclosure of Information. The Purchaser has had an opportunity to discuss the Company's business, management, financial affairs and the terms and conditions of the offering of the Shares with the Company's management and has had an opportunity to review the Company's facilities. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 2 of this Agreement or the right of the Purchasers to rely thereon.

3.4 Restricted Securities. The Purchaser understands that the Shares have not been, and will not be, registered under the Securities Act, by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Purchaser's representations as expressed herein. The Purchaser understands that the Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Purchaser must hold the Shares indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. The Purchaser acknowledges that the Company has no obligation to register or qualify the Shares, or the Common Stock into which it may be converted, for resale except as set forth in the Investors' Rights Agreement. The Purchaser further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Shares, and on requirements relating to the Company which are outside of the Purchaser's control, and which the Company is under no obligation and may not be able to satisfy. The Purchaser understands that this offering is not intended to be part of the public offering, and that the Purchaser will not be able to rely on the protection of Section 11 of the Securities Act.

3.5 No Public Market. The Purchaser understands that no public market now exists for the Shares, and that the Company has made no assurances that a public market will ever exist for the Shares.

3.6 Legends. The Purchaser understands that the Shares and any securities issued in respect of or exchange for the Shares, may bear one or more of the following legends:

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933."

(b) Any legend set forth in, or required by, the other Transaction Agreements.

(c) Any legend required by the securities laws of any state to the extent such laws are applicable to the Shares represented by the certificate so legended.

3.7 Accredited Investor. The Purchaser is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

3.8 Foreign Investors. If the Purchaser is not a United States person (as defined by Section 7701(a)(30) of the Code), the Purchaser hereby represents that (a) it has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Shares or any use of this Agreement,

including (i) the legal requirements within its jurisdiction for the purchase of the Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the Shares, and (b) its subscription and payment for and continued beneficial ownership of the Shares will not violate any applicable securities or other laws of the Purchaser's jurisdiction.

3.9 CFIUS Foreign Person Status. If the Purchaser is a foreign person (as defined under Section 721 of the Defense Production Act of 1950, as amended, including all implementing regulations thereof (the "**DPA**")), the Purchaser hereby represents that:

(a) It is an Excepted Investor, as that term is defined under the DPA and pursuant to 31 C.F.R. § 800.219; or,

(b) The Purchaser does not provide any foreign person affiliated with the Purchaser (other than Excepted Investors), whether affiliated as a limited partner or otherwise, any of the following with respect to the Company: (i) access to any "material nonpublic technical information" (as defined in the DPA) in the possession of the Company; (ii) membership or observer rights on the Board of Directors or equivalent governing body of the Company or the right to nominate an individual to a position on the Board of Directors or equivalent governing body of the Company; (iii) any involvement, other than through the voting of shares, in the substantive decision-making of the Company regarding (A) the use, development, acquisition, or release of any "critical technology" (as defined in the DPA), (B) the use, development, acquisition, safekeeping, or release of "sensitive personal data" (as defined in the DPA) of U.S. citizens maintained or collected by the Company, or (C) the management, operation, manufacture, or supply of "covered investment critical infrastructure" (as defined in the DPA); or (iv) "control" of the Company (as defined in the DPA).

3.10 No General Solicitation. Neither the Purchaser, nor any of its officers, directors, employees, agents, stockholders or partners has either directly or indirectly, including, through a broker or finder (a) engaged in any general solicitation, or (b) published any advertisement in connection with the offer and sale of the Shares.

3.11 Exculpation Among Purchasers. The Purchaser acknowledges that it is not relying upon any Person, other than the Company and its officers and directors, and/or such Purchaser's investment advisers, in making its investment or decision to invest in the Company. The Purchaser agrees that neither any Purchaser nor the respective controlling Persons, officers, directors, trustees, partners, agents, investment advisers, or employees of any Purchaser shall be liable to any other Purchaser for any action heretofore taken or omitted to be taken by any of them in connection with the purchase of the Shares.

3.12 Residence. If the Purchaser is an individual, then the Purchaser resides in the state or province identified in the address of the Purchaser set forth on Exhibit A; if the Purchaser is a partnership, corporation, limited liability company or other entity, then the office or offices of the Purchaser in which its principal place of business is identified in the address or addresses of the Purchaser set forth on Exhibit A.

4. Conditions to the Purchasers' Obligations at Closing. The obligations of each Purchaser to purchase Shares at the Initial Closing or any subsequent Closing are subject to the fulfillment, on or before such Closing (unless otherwise stated), of each of the following conditions, unless otherwise waived:

4.1 Representations and Warranties. The representations and warranties of the Company contained in Section 2 shall be true and correct in all respects as of the Initial Closing.

4.2 Performance. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by the Company on or before such Closing.

4.3 Compliance Certificate. The President of the Company shall deliver to the Purchasers at the Initial Closing a certificate certifying that the conditions specified in Sections 4.1 and 4.2 have been fulfilled.

4.4 Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be obtained and effective as of such Closing.

4.5 Opinion of Company Counsel. The Purchasers shall have received from Reed Smith LLP, counsel for the Company, an opinion, dated as of the Initial Closing, in substantially the form of Exhibit G attached to this Agreement.

4.6 Investors' Rights Agreement. As of the Initial Closing, the Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder) and such other parties thereto sufficient to amend and restate the Prior Agreement (as defined in the Investors' Rights Agreement) shall have executed and delivered the Investors' Rights Agreement.

4.7 Right of First Refusal and Co-Sale Agreement. As of the Initial Closing, the Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder), and such other parties thereto sufficient to amend and restate the Prior Agreement (as defined in the Right of First Refusal and Co-Sale Agreement) shall have executed and delivered the Right of First Refusal and Co-Sale Agreement.

4.8 Voting Agreement. As of the Initial Closing, the Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder), and such other parties thereto sufficient to amend and restate the Prior Agreement (as defined in the Voting Agreement) shall have executed and delivered the Voting Agreement.

4.9 Restated Certificate. The Company shall have filed the Restated Certificate with the Secretary of State of Delaware on or prior to the Initial Closing, which shall continue to be in full force and effect as of the applicable Closing.

4.10 Management Rights Letters. The Company shall have executed and delivered to each Purchaser requesting same a Management Rights Letter in form and substance reasonably acceptable to the Company and such Purchaser.

4.11 Secretary's Certificate. The Secretary of the Company shall have delivered to the Purchasers at the Initial Closing a certificate certifying (i) the Restated Certificate and the Bylaws of the Company as of the Initial Closing, (ii) resolutions of the Board approving the Transaction Agreements and the transactions contemplated under the Transaction Agreements, and (iii) resolutions of the stockholders of the Company approving the Restated Certificate.

4.12 Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the applicable Closing and all documents incident thereto shall be reasonably satisfactory in form and substance to each Purchaser, and each Purchaser (or its counsel) shall have received all such counterpart original and certified or other copies of such documents as reasonably requested. Such documents may include good standing certificates.

4.13 Preemptive Rights. The Company shall have fully satisfied (including with respect to rights of timely notification) or obtained enforceable waivers in respect of any preemptive or similar rights directly or indirectly affecting any of its securities.

4.14 Board of Directors. As of the Initial Closing, the authorized size of the Board shall be seven (7), and the Board shall be comprised of Rachel E. Haurwitz, Natalie R. Sacks, Robert Weisskoff, Jeffrey Long-McGie and Santhosh Palani, with two (2) vacancies thereon.

4.15 Indemnification Agreements. At the Initial Closing, the Company shall have executed and delivered an Indemnification Agreement with each member of Board of Directors as of the Initial Closing who is not then a party to an Indemnification Agreement.

5. Conditions of the Company's Obligations at Closing. The obligations of the Company to sell Shares to the Purchasers at the Initial Closing or any subsequent Closing are subject to the fulfillment, on or before such Closing (unless otherwise stated), of each of the following conditions, unless otherwise waived:

5.1 Representations and Warranties. The representations and warranties of each Purchaser contained in Section 3 shall be true and correct in all respects as of such Closing.

5.2 Performance. The Purchasers shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by them on or before such Closing.

5.3 Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be obtained and effective as of such Closing.

5.4 Investors' Rights Agreement. As of the Initial Closing, parties thereto sufficient to amend and restate the Prior Agreement (as defined in the Investors' Rights Agreement) (other than the Company) shall have executed and delivered the Investors' Rights Agreement and each Purchaser shall have executed and delivered the Investors' Rights Agreement at the Closing in which such Purchaser is participating (if not then a party thereto).

5.5 Right of First Refusal and Co-Sale Agreement. As of the Initial Closing, parties thereto sufficient to amend and restate the Prior Agreement (as defined in the Right of First Refusal and Co-Sale Agreement) (other than the Company) shall have executed and delivered the Right of First Refusal and Co-Sale Agreement and each Purchaser shall have executed and delivered the Right of First Refusal and Co-Sale Agreement at the Closing in which such Purchaser is participating (if not then a party thereto).

5.6 Voting Agreement. As of the Initial Closing, parties thereto sufficient to amend and restate the Prior Agreement (as defined in the Voting Agreement) (other than the Company) shall have executed and delivered the Voting Agreement and each Purchaser shall have executed and delivered the Voting Agreement at the Closing in which such Purchaser is participating (if not then a party thereto).

6. Miscellaneous.

6.1 Survival of Warranties. Unless otherwise set forth in this Agreement, the representations and warranties of the Company and the Purchasers at the Initial Closing contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Initial Closing (and the representations and warranties of the Additional Purchasers contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the applicable Closing) and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the Purchasers or the Company.

6.2 Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

6.3 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware without regard to conflict of law principles.

6.4 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, such as www.docusign.com), or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.5 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.6 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt, or (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on the signature page or Exhibit A, or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 6.6(a). If notice is given to the Company, a copy (which shall not constitute notice), shall also be given to legalnotices@cariboubio.com and to Reed Smith LLP, 1901 Avenue of the Stars, Suite 700, Los Angeles, California 90067, email amukhey@reedsmith.com, Attention: Ashok Mukhey, Esq.

(b) Each Purchaser consents to the delivery of any stockholder notice pursuant to the DGCL, as amended or superseded from time to time, or under any of the Transaction Agreements by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the email address set forth below such Purchaser's name on the signature page or Exhibit A as updated from time to time by notice to the Company or as on the books of the Company. Each Purchaser agrees to promptly notify the Company of any change in its email address, and that failure to do so shall not affect the foregoing.

6.7 No Finder's Fees. Each party represents that, except for the fee payable by the Company to SVB Leerink LLC, it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. Each Purchaser agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finder's or broker's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which such Purchaser or any of its officers, employees or representatives is responsible. The Company agrees to indemnify and hold harmless each Purchaser from any liability for any commission or compensation in the nature of a finder's or broker's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

6.8 Amendments and Waivers. Except as set forth in Section 1.3 of this Agreement, any term of this Agreement may be amended, terminated or waived only with the written consent of the Company, and (i) the holders of a majority of the then-outstanding Shares, or (ii) for an amendment, termination or waiver effected prior to the Initial Closing, Purchasers obligated to purchase a majority of the Shares to be issued at the Initial Closing. Section 1.3 of this Agreement may not be amended, terminated or waived without the written consent of PFM, Ridgeback, and Farallon. Any amendment or waiver effected in accordance with this Section 6.8 shall be binding upon the Purchasers and each transferee of the Shares (or the Common Stock issuable upon conversion thereof), each future holder of all such securities, and the Company.

6.9 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

6.10 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.11 Entire Agreement. This Agreement (including the Exhibits hereto), the Restated Certificate and the other Transaction Agreements constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled.

6.12 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.13 Expenses. With respect to services rendered in connection with the Initial Closing, the Company shall reimburse the reasonable fees and expenses of one or more counsel (including IP counsel) to any or all of the Lead Investors in an amount not to exceed $125,000 in the aggregate for counsel to all of the Lead Investors (to be allocated among them as agreed by the Lead Investors).

6.14 Tekla Funds. A copy of the Declaration of Trust, as amended and restated, for each of Tekla Healthcare Investors and Tekla Life Sciences Investors (together, the "**Tekla Funds**") is on file with the Secretary of State of The Commonwealth of Massachusetts, and notice is hereby given that this Agreement is executed on behalf of the Tekla Funds by an officer or trustee of the Tekla Funds in his or her capacity as an officer or trustee of the Tekla Funds, and not individually and that the obligations of or arising out of this Agreement are not binding upon any of the trustees, officers or shareholders individually but are binding only upon the assets and property of each of the respective Tekla Funds.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

COMPANY:

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

PFM Healthcare Master Fund, L.P.
By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

Partner Investments, L.P.
By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

PFM Healthcare Growth Equity Holdings I, LLC
By: PFM Health Sciences GP, LLC, its member manager

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

ZONE III HEALTHCARE HOLDINGS, LLC

By: Farallon Capital Management, L.L.C., its Manager

By: /s/ Philip Dreyfuss
Name: Philip Dreyfuss
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

RIDGEBACK CAPITAL INVESTMENTS LP by RIDGEBACK CAPITAL MANAGEMENT LLC its Fund Manager:

By: /s/ Christian Sheldon
Name: Christian Sheldon
Title: COO

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

AbbVie Inc.

By: /s/ Adam Houghton
Name: Adam Houghton
Title: VP & Head, AbbVie Ventures

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

MAVERICK VENTURES INVESTMENT FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

MAVERICK ADVISORS FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Janus Henderson Capital Funds plc on behalf of its series Janus Henderson Global Life Sciences Fund

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

Janus Henderson Biotech Innovation Master Fund Limited

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Adage Capital Partners, LP

By: Adage Capital Partners, GP, LLC, it's General Partner

By: Adage Capital Advisors, LLC it's Managing Member

By: /s/ Dan Lehan
Name: Dan Lehan
Title: Chief Operating Officer

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Jenny Rooke

By: /s/ Jenny Rooke

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

WS Investment Company, LLC (21A)

By: /s/ James Terranova
Name:
Title:

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

CAROLEM CAPITAL LLC

By: /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

NRG CAPITAL HOLDINGS LLC

By: /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

LLS TAP, LLC

By: /s/ Louis DeGenarro
Name: Louis DeGennaro
Title: President & CEO

By: /s/ Gordon Miller
Name: Gordon Miller
Title: EVP & CFO

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Tekla Healthcare Investors*

By: /s/ Daniel R. Omsetad
Name: Daniel R. Omstead
Title: President

* The name Tekla Healthcare Investors is the designation of the Trustees for the time being under an Amended & Restated Declaration of Trust dated April 21, 1987, as amended, and all persons dealing with Tekla Healthcare Investors must look solely to the trust property for the enforcement of any claim against Tekla Healthcare Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Healthcare Investors.

Tekla Life Sciences Investors*

By: /s/ Daniel R. Omsetad
Name: Daniel R. Omstead
Title: President

* The name Tekla Life Sciences Investors is the designation of the Trustees for the time being under a Declaration of Trust dated February 20, 1992, as amended, and all persons dealing with Tekla Life Sciences Investors must look solely to the trust property for the enforcement of any claim against Tekla Life Sciences Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Life Sciences Investors.

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Point72 Biotech Private Investments, LLC

By: /s/ Vincent Tortorella
Name: Vincent Tortorella
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

PONTIFAX GLOBAL FOOD AND AGRICULTURE TECHNOLOGY FUND L.P.

By: /s/ Benjamin Belldegrun
Name: Benjamin Belldegrun
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Avego Bioscience Capital, L.P.

By: Avego Bioscience Capital GP, LLC, its general partner

By: /s/ James Flexner
Name: James Flexner
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Mintz Levin Special Investments Fund LLC —Series FY21

By: /s/ Megan N. Gates
Name: Megan N. Gates
Title: Member

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Zachary A. Robbins Trust dtd December 31, 1987

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Robbins Family Trust of 1986

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Lucas Hamilton Robbins Trust dtd November 17, 1991

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Avidity Master Fund LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

Avidity Capital Fund II LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

INVUS PUBLIC EQUITIES, L.P.

By: /s/ Raymond Debbane
Name: Raymond Debbane
Title: President of its General Partner

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

HEALTHCARE INNOVATION INVESTMENT FUND LLC

By: /s/ Joseph R. Gentile
Name: Joseph R. Gentile
Title: Manager

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Pacific Continental Investment Company, LLC

By: /s/ Marc Stridiron
Name: Marc Stridiron
Title: Portfolio Manager

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

LifeSci Venture Partners II, LP

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

LifeSci Venture Master SPV, LLC

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Rodolphe and Lisa Barrangou

By: /s/ Rodolphe Barrangou

By: /s/ Lisa Barrangou

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

CA Fund I, a series of 5 Prime Ventures, LP

By: Fund GP, LLC its General Partner
By: Belltower Fund Group, Ltd. Manager of the General Partner

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this Series C Preferred Stock Purchase Agreement as of the date first written above.

PURCHASERS:

Monashee Solitario Fund LP

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

DS Liquid Div RVA MON LLC

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

EXHIBITS

Exhibit A -	**SCHEDULE OF PURCHASERS**
Exhibit B -	**FORM OF RESTATED CERTIFICATE**
Exhibit C -	**DISCLOSURE SCHEDULE**
Exhibit D -	**FORM OF INVESTORS' RIGHTS AGREEMENT**
Exhibit E -	**FORM OF RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT**
Exhibit F -	**FORM OF VOTING AGREEMENT**
Exhibit G -	**FORM OF OPINION OF COMPANY COUNSEL**
Exhibit H -	**FORM OF INDEMNIFICATION AGREEMENT**
Schedule 1	**APPROVED PURCHASERS**

Exhibit 10.60

EXECUTION VERSION

THIRD AMENDED AND RESTATED VOTING AGREEMENT

THIS THIRD AMENDED AND RESTATED VOTING AGREEMENT (this "**Agreement**") is made and entered into as of March 2, 2021, by and among Caribou Biosciences, Inc., a Delaware corporation (the "**Company**"), PFM Health Sciences, LP, each holder of the Company's Series A Preferred Stock, $0.0001 par value per share ("**Series A Preferred Stock**"), each holder of the Company's Series A-1 Preferred Stock, $0.0001 par value per share (**"Series A-1 Preferred Stock**"), each holder of the Company's Series B Preferred Stock, $0.0001 par value per share (the "**Series B Preferred Stock**"), each holder of the Company's Series C Preferred Stock, $0.0001 par value per share (the "**Series C Preferred Stock**;" and referred to herein collectively with the Series A Preferred Stock, the Series A-1 Preferred Stock, and the Series B Preferred Stock, the "**Preferred Stock**"), listed on Schedule A (together with any subsequent investors, or transferees, who become parties hereto as "Investors" pursuant to Sections 6.1(a) or 6.2 below, the "**Investors**") and those certain stockholders of the Company and holders of options to acquire shares of the capital stock of the Company listed on Schedule B (together with any subsequent stockholders or option holders, or any transferees, who become parties hereto as "Key Holders" pursuant to Sections 6.1(b) or 6.2 below, the "**Key Holders**", and together collectively with the Investors, the "**Stockholders**").

RECITALS

A. The Company, certain of the Investors, and the Key Holders previously entered into a Second Amended and Restated Voting Agreement, dated as of May 12, 2016 (the "**Prior Agreement**"), in connection with the purchase of shares of Series B Preferred Stock by certain of the Investors and desire to amend and restate the Prior Agreement as set forth herein.

B. Concurrently with the execution of this Agreement, the Company and certain of the Investors are entering into a Series C Preferred Stock Purchase Agreement (the "**Purchase Agreement**") providing for the sale of shares of Series C Preferred Stock.

C. The Fourth Amended and Restated Certificate of Incorporation of the Company (the "**Restated Certificate**") provides that (a) the holders of the Series C Preferred Stock, voting as a separate class, shall be entitled to elect two (2) directors of the Company (the "**Series C Preferred Directors**"), (b) the holders of Series A Preferred Stock, Series A-1 Preferred Stock and Series B Preferred Stock, voting together as a single separate class, on an as-converted to Common Stock basis, shall be entitled to elect one (1) director of the Company (the "**Series A/A-1/B Preferred Director**" and together with the Series C Preferred Directors then in office, the "**Preferred Directors**", and each of them, a "**Preferred Director**"), (c) the holders of the shares of Common Stock, voting as a separate class, shall be entitled to elect one (1) director of the Company, and (d) the holders of the shares of Common Stock and the holders of the shares of Preferred Stock, voting together as a single class on an as-converted to Common Stock basis, shall be entitled to elect the balance of the total number of directors of the Company.

D. The Company desires to induce certain of the Investors to enter into the Purchase Agreement by amending and restating the Prior Agreement in its entirety as set forth herein, and the parties hereto desire to set forth herein their agreements and understandings with respect to how shares of the Company's capital stock held by them will be voted or tendered in connection with, an acquisition of the Company and in connection with an increase in the number of shares of Common Stock required to provide for the conversion of the Preferred Stock.

NOW, THEREFORE, the parties agree as follows:

1. Voting Provisions Regarding Board of Directors.

1.1. Size of the Board. Each Stockholder agrees to vote, or cause to be voted, all Shares (as defined below) owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that the size of the Board of Directors of the Company (the "**Board**") shall be set and remain at seven (7) directors. For purposes of this Agreement, the term "**Shares**" shall mean and include any securities of the Company the holders of which are entitled to vote for members of the Board,

including without limitation, all shares of Common Stock, Series A Preferred Stock, Series A-1 Preferred Stock, Series B Preferred Stock, and Series C Preferred Stock, by whatever name called, now owned or subsequently acquired by a Stockholder, however acquired, whether through stock splits, stock dividends, reclassifications, recapitalizations, similar events or otherwise.

1.2. Board Composition. Each Stockholder agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that at each annual or special meeting of stockholders at which an election of directors is held or pursuant to any written consent of the stockholders, the following natural persons shall be elected to the Board:

(a) One (1) person elected by a majority in interest of the holders of the Series A Preferred Stock, the Series A-1 Preferred Stock and the Series B Preferred Stock, voting together as a single class on an as-converted to Common Stock basis (the "**Series A/A-1/B Designee**"), who shall be designated by F-Prime Capital Partners Healthcare Fund IV LP ("**F-Prime**") for so long as F-Prime and its Affiliates (as defined below) continue to own beneficially at least 1,019,692 of the shares of Common Stock of the Company (including shares of Common Stock issued or issuable upon conversion of the Series A-1 Preferred Stock), which number is subject to appropriate adjustment for all stock splits, dividends, combinations, recapitalizations and the like. The Series A/A-1/B Designee shall initially be Robert Weisskoff;

(b) Two (2) persons elected by the holders of a majority of the shares of Series C Preferred Stock outstanding, voting as a single class (i) one of whom (the "**PFM Series C Designee**") shall be designated by PFM Health Sciences, LP and its Affiliate funds ("**PFM**") for so long as PFM continues to own beneficially at least 231,790 shares of Series C Preferred Stock (including shares of Common Stock issued or issuable upon conversion of the Series C Preferred Stock), which number is subject to appropriate adjustment for all stock splits, dividends, combinations, recapitalizations and the like, and (ii) one of whom (the "**Ridgeback Series C Designee**;" the Ridgeback Designee and the PFM Designee are collectively referred to herein as the "**Series C Designees**") shall be designated by RIDGEBACK CAPITAL INVESTMENTS LP ("**Ridgeback**") for so long as Ridgeback and its Affiliate funds continue to own beneficially at least 231,790 shares of Series C Preferred Stock (including shares of Common Stock issued or issuable upon conversion of the Series C Preferred Stock), which number is subject to appropriate adjustment for all stock splits, dividends, combinations, recapitalizations and the like; provided, however, that if either PFM and/or Ridgeback is no longer entitled to designate a Series C Designee as provided in this sentence, then Zone III Healthcare Holdings, LLC ("**Farallon**") shall be entitled to designate the Series C Designee that otherwise would have been designated by PFM and/or Ridgeback (as the case may be) provided that Farallon and its Affiliate funds owns beneficially as of the date Farallon's right to designate a Series C Designee becomes effective hereunder, and thereafter Farallon and its Affiliate funds continue to own beneficially, at least 231,790 shares of Series C Preferred Stock (including shares of Common Stock issued or issuable upon conversion of the Series C Preferred Stock), which number is subject to appropriate adjustment for all stock splits, dividends, combinations, recapitalizations and the like. The PFM Series C Designee shall initially be Santhosh Palani; and the Ridgeback Series C Designee shall initially be Jeffrey Long-McGie;

(c) One (1) person elected by the holders of a majority of the shares of Common Stock outstanding (the "**Common Designee**"), which Common Designee shall be the Company's Chief Executive Officer, who shall initially be Rachel E. Haurwitz (the "**CEO Director**"), provided that if for any reason the CEO Director shall cease to serve as the Chief Executive Officer of the Company, each of the Stockholders shall promptly vote their respective Shares (i) to remove the former Chief Executive Officer from the Board if such person has not resigned as a member of the Board and (ii) to elect such person's replacement as Chief Executive Officer of the Company as the new CEO Director; and

(d) Three (3) independent persons with experience in the life sciences field who are not affiliated with the Company or any Investor, which persons shall be elected by the holders of a majority of the shares of Common Stock and the Preferred Stock outstanding, voting together as a single class on an as-converted to Common Stock basis (the "**Independent Directors**"), and shall initially be designated by management of the Company and approved by a majority of the Preferred Directors. The Independent Directors shall initially be Natalie Sacks with two (2) initial vacancies in the seats allocated for Independent Directors. After an Independent Director

shall initially be elected or appointed for a seat, any re-elections, substitutions or replacements for that seat shall be designees proposed by management of the Company and approved by a majority of the remaining Board members (including the remaining sitting Independent Directors).

To the extent that any of clauses (a) through (d) above shall not be applicable, any member of the Board who would otherwise have been designated in accordance with the terms thereof shall instead be voted upon by all the stockholders of the Company entitled to vote thereon in accordance with, and pursuant to, the Company's Restated Certificate.

For purposes of this Agreement, an individual, firm, corporation, partnership, association, limited liability company, trust or any other entity (collectively, a "**Person**") shall be deemed an "**Affiliate**" of another Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, limited partner, member, manager, managing member, employee, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or is under common investment management with or shares the same management company with, such Person. For purposes of this definition, the term "control" when used with respect to any Person shall mean the power to direct the management or policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise, and the terms "controlling" and "controlled" shall have meanings correlative to the foregoing.

1.3. Failure to Designate a Board Member. In the absence of any designation from the Persons or groups with the right to designate a director as specified above, the director previously designated by them and then serving shall be reelected if willing and eligible to serve; otherwise such Board seat shall remain vacant until otherwise filled as provided above.

1.4. Removal of Board Members. Each Stockholder also agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that:

(a) no director elected pursuant to Section 1.2(a), (b) or (d) or Section 1.3 of this Agreement may be removed from office unless (i) such removal is directed or approved by (A) in the case of Section 1.2(a) or (b), the affirmative vote of the Person(s) entitled under Section 1.2(a) or (b), as the case may be, to designate such director or (B) in the case of Section 1.2(d), a majority of the other Board members; and (ii) the Person(s) originally entitled to designate or approve such director or occupy such Board seat pursuant to Section 1.2 (a), (b) or (d) is no longer so entitled to designate or approve such director or occupy such Board seat;

(b) any vacancies created by the resignation, removal or death of a director elected pursuant to Sections 1.3 or 1.4 shall be filled pursuant to the provisions of this Section 1; and

(c) upon the request of any party or parties entitled to designate a director as provided in Section 1.2(a) and Section 1.2(b) and to remove an Independent Director pursuant Section 1.4(a)(i)(B), in each case to remove such director, such director shall be removed.

All Stockholders agree to execute any written consents required to perform the obligations of this Agreement, and the Company agrees at the request of any party entitled to designate directors to call a special meeting of stockholders for the purpose of electing directors.

1.5. No Liability for Election of Recommended Directors. No Stockholder, nor any Affiliate of any Stockholder, shall have any liability as a result of designating a person for election as a director for any act or omission by such designated person in his or her capacity as a director of the Company, nor shall any Stockholder have any liability as a result of voting for any such designee in accordance with the provisions of this Agreement.

1.6. No "Bad Actor" Designees. Each Person with the right to designate or participate in the designation of a director as specified above hereby represents and warrants to the Company that, to such Person's knowledge, none of the "bad actor" disqualifying events described in Rule 506(d)(1)(i)-(viii) promulgated under the

Securities Act of 1933, as amended (the "**Securities Act**") (each, a "**Disqualification Event**"), is applicable to such Person's initial designee named above except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. Any director designee to whom any Disqualification Event is applicable, except for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable, is hereinafter referred to as a "**Disqualified Designee**". Each Person with the right to designate or participate in the designation of a director as specified above hereby covenants and agrees (A) not to designate or participate in the designation of any director designee who, to such Person's knowledge, is a Disqualified Designee and (B) that in the event such Person becomes aware that any individual previously designated by any such Person is or has become a Disqualified Designee, such Person shall as promptly as practicable take such actions as are necessary to remove such Disqualified Designee from the Board and designate a replacement designee who is not a Disqualified Designee.

2. Vote to Increase Authorized Common Stock. Each Stockholder agrees to vote or cause to be voted all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to increase the number of authorized shares of Common Stock from time to time to ensure that there will be sufficient shares of Common Stock available for conversion of all of the shares of Preferred Stock outstanding at any given time.

3. Drag-Along Right.

3.1. Definitions. A "**Sale of the Company**" shall mean: (a) a transaction or series of related transactions in which a Person, or a group of related Persons, acquires from stockholders of the Company shares representing more than a majority of the outstanding voting power of the Company (a "**Stock Sale**"); (b) a SPAC Transaction (as defined in the Restated Certificate) or (c) a transaction that qualifies as a "**Deemed Liquidation Event**" as defined in the Restated Certificate.

3.2. Actions to be Taken. In the event that (a) the holders of a majority of the Preferred Stock, voting together as a single class on an as-converted to Common Stock basis (collectively, the "**Selling Investors**"), (b) the Board, and (c) if the Sale of the Company is a SPAC Transaction that is not a Qualified SPAC Transaction (as defined in the Restated Certificate), the holders of at least two-thirds (2/3rds) of the outstanding shares of Series C Preferred Stock, voting separately as a single class, approve a Sale of the Company in writing, specifying that this Section 3 shall apply to such transaction, then each Stockholder and the Company hereby agree:

(a) if such transaction requires stockholder approval, with respect to all Shares that such Stockholder owns or over which such Stockholder otherwise exercises voting power, to vote (in person, by proxy or by action by written consent, as applicable) all Shares in favor of, and adopt, such Sale of the Company (together with any related amendment to the Restated Certificate required in order to implement such Sale of the Company) and to vote in opposition to any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Sale of the Company;

(b) if such transaction is a Stock Sale, to sell the same proportion of shares of capital stock of the Company beneficially held by such Stockholder as is being sold by the Selling Investors to the Person to whom the Selling Investors propose to sell their Shares, and, except as permitted in Section 3.3 below, on the same terms and conditions as the Selling Investors;

(c) to execute and deliver all related documentation and take such other action in support of the Sale of the Company as shall reasonably be requested by the Company or the Selling Investors in order to carry out the terms and provision of this Section 3, including without limitation executing and delivering instruments of conveyance and transfer, and any purchase agreement, merger agreement, indemnity agreement, escrow agreement, consent, waiver, governmental filing, share certificates duly endorsed for transfer (free and clear of impermissible liens, claims and encumbrances) and any similar or related documents;

(d) not to deposit, and to cause their Affiliates not to deposit, except as provided in this Agreement, any Shares of the Company owned by such party or Affiliate in a voting trust or subject any Shares to any arrangement or agreement with respect to the voting of such Shares, unless specifically requested to do so by the acquiror in connection with the Sale of the Company;

(e) to refrain from exercising any dissenters' rights or rights of appraisal under applicable law at any time with respect to such Sale of the Company;

(f) if the consideration to be paid in exchange for the Shares pursuant to this Section 3 includes any securities and due receipt thereof by any Stockholder would require under applicable law (x) the registration or qualification of such securities or of any Person as a broker or dealer or agent with respect to such securities or (y) the provision to any Stockholder of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Stockholder in lieu thereof, against surrender of the Shares which would have otherwise been sold by such Stockholder, an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities which such Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the Shares; and

(g) in the event that the Selling Investors, in connection with such Sale of the Company, appoint a stockholder representative (the "**Stockholder Representative**") with respect to matters affecting the Stockholders under the applicable definitive transaction agreements following consummation of such Sale of the Company, (x) to consent to (i) the appointment of such Stockholder Representative, (ii) the establishment of any applicable escrow, expense or similar fund in connection with any indemnification or similar obligations, and (iii) the payment of such Stockholder's pro rata portion (from the applicable escrow or expense fund or otherwise) of any and all reasonable fees and expenses to such Stockholder Representative in connection with such Stockholder Representative's services and duties in connection with such Sale of the Company and its related service as the representative of the Stockholders, and (y) not to assert any claim or commence any suit against the Stockholder Representative or any other Stockholder with respect to any action or inaction taken or failed to be taken by the Stockholder Representative in connection with its service as the Stockholder Representative, absent fraud or willful misconduct.

3.3. Exceptions. Notwithstanding the foregoing, a Stockholder will not be required to comply with Section 3.2 above in connection with any proposed Sale of the Company (the "**Proposed Sale**") unless:

(a) any representations and warranties to be made by such Stockholder in connection with the Proposed Sale are limited to representations and warranties related to authority, ownership and the ability to convey title to such Shares, including but not limited to representations and warranties that (i) the Stockholder holds all right, title and interest in and to the Shares such Stockholder purports to hold, free and clear of all liens and encumbrances, (ii) the obligations of the Stockholder in connection with the transaction have been duly authorized, if applicable, (iii) the documents to be entered into by the Stockholder have been duly executed by the Stockholder and delivered to the acquirer and are enforceable against the Stockholder in accordance with their respective terms and (iv) neither the execution and delivery of documents to be entered into by such Stockholder in connection with the transaction, nor the performance of such Stockholder's obligations thereunder, will cause a breach or violation of the terms of any agreement to which such Stockholder is a party, or any law or judgment, order or decree of any court or governmental agency that applies to such Stockholder;

(b) the Stockholder shall not be liable for the inaccuracy of any representation or warranty made by any other Person in connection with the Proposed Sale, other than the Company (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders);

(c) the liability for indemnification, if any, of such Stockholder in the Proposed Sale and for the inaccuracy of any representations and warranties made by the Company in connection with such Proposed Sale, is several and not joint with any other Person (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties, and covenants provided by all stockholders), and, subject to the provisions of the Restated Certificate related to the allocation of the escrow, is pro rata in proportion to, and does not exceed, the amount of consideration paid to such Stockholder in connection with such Proposed Sale;

(d) liability shall be limited to such Stockholder's applicable share (determined based on the respective proceeds payable to each Stockholder in connection with such Proposed Sale in accordance with the provisions of the Restated Certificate) of a negotiated aggregate indemnification amount that applies equally to all Stockholders but that in no event exceeds the amount of consideration paid to such Stockholder in connection with such Proposed Sale, except with respect to claims related to fraud by such Stockholder, the liability for which need not be limited as to such Stockholder;

(e) upon the consummation of the Proposed Sale, (i) each holder of each class or series of the Company's stock will receive the same form of consideration for their shares of such class or series as is received by other holders in respect of their shares of such same class or series of stock, (ii) each holder of a series of Preferred Stock will receive the same amount of consideration per share of such series of Preferred Stock as is received by other holders in respect of their shares of such same series, (iii) each holder of Common Stock will receive the same amount of consideration per share of Common Stock as is received by other holders in respect of their shares of Common Stock, and (iv) the aggregate consideration receivable by all holders of the Preferred Stock and Common Stock shall be allocated among the holders of Preferred Stock and Common Stock on the basis of the relative liquidation preferences to which the holders of each respective series of Preferred Stock and the holders of Common Stock are entitled in a Deemed Liquidation Event (assuming for this purpose that the Proposed Sale is a Deemed Liquidation Event) in accordance with the Company's Certificate of Incorporation in effect immediately prior to the Proposed Sale, unless the holders of at least a majority of the Preferred Stock, voting together as a single class on an as-converted to Common Stock basis, elect to not treat such event as a Deemed Liquidation Event by written notice given to the Company at least ten (10) days prior to the effective date of such Proposed Sale; provided, however, that, notwithstanding the foregoing, (A) the election to not treat such event as a Deemed Liquidation Event shall not apply to (1) the Series B Preferred Stock unless such electing holders include the holders of a majority of the outstanding Series B Preferred Stock, voting or consenting together as a single class, in accordance with the Company's Certificate of Incorporation in effect immediately prior to the Proposed Sale, or (2) the Series C Preferred Stock unless such electing holders include the holders of at least two-thirds (2/3rds) of the outstanding Series C Preferred Stock, voting or consenting together as a single class, in accordance with the Company's Certificate of Incorporation in effect immediately prior to the Proposed Sale, or (B) if the consideration to be paid in exchange for a Key Holder's Shares or an Investor's Shares, as applicable, pursuant to this Section 3.3(e) includes any securities and due receipt thereof by such Key Holder or Investor would require under applicable law (x) the registration or qualification of such securities or of any Person as a broker or dealer or agent with respect to such securities or (y) the provision to such Key Holder or Investor of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Key Holder or Investor in lieu thereof, against surrender of such Key Holder's Shares or such Investor's Shares, as applicable, which would have otherwise been sold by such Key Holder or Investor, an amount in cash equal to the fair value (as determined in good faith by the Board) of the securities which such Key Holder or Investor would otherwise receive as of the date of the issuance of such securities in exchange for such Key Holder's Shares or such Investor's Shares, as applicable;

(f) subject to clause (e) above, requiring the same form of consideration to be available to the holders of any single class or series of capital stock, if any holders of any capital stock of the Company are given an option as to the form and amount of consideration to be received as a result of the Proposed Sale, all holders of such capital stock will be given the same option; provided, however, that nothing in this Section 3.3(f) shall entitle any holder to receive any form of consideration that such holder would be ineligible to receive as a result of such holder's failure to satisfy any condition, requirement or limitation that is generally applicable to the Company's stockholders; and

(g) the Stockholder is not required to agree (unless such Stockholder is a Company officer or employee) to any restrictive covenant in connection with the Proposed Sale (including, without limitation, any covenant not to compete or covenant not to solicit customers, employees or suppliers of any party to the Proposed Sale) or any release of claims other than a release in customary form of claims arising solely in such Stockholder's capacity as a stockholder of the Company.

3.3A Strategic Investor Exception. Notwithstanding anything in Section 3.2 to the contrary, no Strategic Investor will be required to comply with Section 3.2 above in connection with any Proposed Sale unless such

Strategic Investor shall not be required to amend, extend or terminate (x)(i) with respect to AbbVie Inc. and its Affiliates ("**AbbVie**"), that certain Collaboration and License Agreement, dated as of February 9, 2021, by and between AbbVie Manufacturing Management Unlimited Company and the Company, (ii) with respect to Genus plc ("**Genus**"), that certain Research Collaboration and License Agreement, dated May 12, 2016, as amended, between the Company and Genus plc and its Affiliates, including all entities within the Agroceres PIC joint venture in Latin America and within the Besun joint venture in China, (iii) with respect to Corteva, the Amended and Restated Collaboration and License Agreement, dated July 13, 2015, as amended, by and between Pioneer Hi-Bred International, Inc. (a member of the Corteva Agriscience group of companies; "**Corteva**") and the Company, or (iv) with respect to Novartis, that certain Research Collaboration and License Agreement, dated December 2, 2014, as amended, by and between Novartis Institutes for BioMedical Research, Inc. ("**Novartis**") and the Company, as any of the foregoing may be amended, modified or supplemented, or (y) any other commercial contracts with the Company, the acquirer or their respective Affiliates. For purposes of this Section 3.3A, "**Strategic Investor**" shall mean any one of AbbVie, Genus plc, Corteva, and Novartis.

3.4. Restrictions on Sales of Control of the Company. No Stockholder shall be a party to any Stock Sale unless all holders of Preferred Stock are allowed to participate in such transaction and the consideration received pursuant to such transaction is allocated among the parties thereto in the manner specified in the Company's Certificate of Incorporation in effect immediately prior to the Stock Sale (as if such transaction were a Deemed Liquidation Event), unless the holders of at least a majority of the Preferred Stock, voting together as a single class on an as-converted to Common Stock basis, elect to not treat such event as a Deemed Liquidation Event by written notice given to the Company at least ten (10) days prior to the effective date of such Stock Sale; provided, however, the election to not treat such event as a Deemed Liquidation Event shall not apply to (a) the Series B Preferred Stock unless such electing holders include the holders of a majority of the outstanding Series B Preferred Stock, voting or consenting together as a single class, in accordance with the Company's Certificate of Incorporation in effect immediately prior to such Stock Sale, or (b) the Series C Preferred Stock unless such electing holders include the holders of at least two-thirds (2/3^{rds}) of the outstanding Series C Preferred Stock, voting or consenting together as a single class, in accordance with the Company's Certificate of Incorporation in effect immediately prior to such Stock Sale.

4. Remedies.

4.1. Covenants of the Company. The Company agrees to use its commercially reasonable efforts, within the requirements of applicable law, to ensure that the rights granted under this Agreement are effective and that the parties enjoy the benefits of this Agreement. Such actions include, without limitation, the use of the Company's commercially reasonable efforts to cause the nomination and election of the directors as provided in this Agreement.

4.2. Irrevocable Proxy and Power of Attorney. Each party to this Agreement hereby constitutes and appoints as the proxies of the party and hereby grants a power of attorney to the President of the Company, with respect to the matters set forth in Section 1.2, the party entitled to designate the director in question and a designee of the Selling Investors, and each of them, with full power of substitution, with respect to the matters set forth herein, including without limitation, election of persons as members of the Board in accordance with Section 1 hereto, votes to increase authorized shares pursuant to Section 2 hereof and votes regarding any Sale of the Company pursuant to Section 3 hereof, and hereby authorizes each of them to represent and to vote, if and only if the party (i) fails to vote or (ii) attempts to vote (whether by proxy, in person or by written consent), in a manner which is inconsistent with the terms of this Agreement, all of such party's Shares in favor of the election of persons as members of the Board determined pursuant to and in accordance with the terms and provisions of this Agreement or the increase of authorized shares or approval of any Sale of the Company pursuant to and in accordance with the terms and provisions of Sections 1, 2 and 3, respectively, of this Agreement or to take any action necessary to effect Sections 1, 2 and 3, respectively, of this Agreement. Each of the proxy and power of attorney granted pursuant to the immediately preceding sentence is given in consideration of the agreements and covenants of the Company and the parties in connection with the transactions contemplated by this Agreement and, as such, each is coupled with an interest and shall be irrevocable unless and until this Agreement terminates or expires pursuant to Section 5 hereof. Each party hereto hereby revokes any and all previous proxies or powers of attorney with respect to the Shares and shall not hereafter, unless and until this Agreement terminates or expires pursuant to Section 5 hereof, purport to grant any other proxy or power of attorney with respect to any of the Shares, deposit any of the Shares into a voting trust or enter into any agreement

(other than this Agreement), arrangement or understanding with any Person, directly or indirectly, to vote, grant any proxy or give instructions with respect to the voting of any of the Shares, in each case, with respect to any of the matters set forth herein.

4.3. Specific Enforcement. Each party acknowledges and agrees that each party hereto will be irreparably damaged in the event any of the provisions of this Agreement are not performed by the parties in accordance with their specific terms or are otherwise breached. Accordingly, it is agreed that each of the Company and the Stockholders shall be entitled to an injunction to prevent breaches of this Agreement, and to specific enforcement of this Agreement and its terms and provisions in any action instituted in any court of the United States or any state having subject matter jurisdiction.

4.4. Remedies Cumulative. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

5. Term. This Agreement shall be effective as of the date hereof and shall continue in effect until and shall terminate upon the earliest to occur of (a) the consummation of the Company's first underwritten public offering of its Common Stock (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to its stock option, stock purchase or similar plan or an SEC Rule 145 transaction); (b) the consummation of a Sale of the Company and distribution of proceeds to or escrow for the benefit of the Stockholders in accordance with the Restated Certificate, provided that the provisions of Section 3 hereof will continue after the closing of any Sale of the Company to the extent necessary to enforce the provisions of Section 3 with respect to such Sale of the Company; (c) the consummation of a SPAC Transaction; and (d) termination of this Agreement in accordance with Section 6.8 below.

6. Miscellaneous.

6.1. Additional Parties.

(a) Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of Series C Preferred Stock after the date hereof, as a condition to the issuance of such shares, the Company shall require that any purchaser of Series C Preferred Stock become a party to this Agreement by executing and delivering (i) the Adoption Agreement attached to this Agreement as Exhibit A, or (ii) a counterpart signature page hereto agreeing to be bound by and subject to the terms of this Agreement as an Investor and Stockholder hereunder. In either event, each such Person shall thereafter be deemed an Investor and Stockholder for all purposes under this Agreement.

(b) In the event that after the date of this Agreement, the Company enters into an agreement with any Person to issue shares of capital stock to such Person (other than to a purchaser of Preferred Stock described in Section 6.1(a) above), following which such Person shall hold Shares constituting one percent (1%) or more of the Company's then outstanding capital stock (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised and/or converted or exchanged), then the Company shall cause such Person, as a condition precedent to entering into such agreement, to become a party to this Agreement by executing an Adoption Agreement in the form attached hereto as Exhibit A, agreeing to be bound by and subject to the terms of this Agreement as a Stockholder and thereafter such Person shall be deemed a Stockholder for all purposes under this Agreement.

6.2. Transfers. Each transferee or assignee of any Shares subject to this Agreement shall continue to be subject to the terms hereof, and, as a condition precedent to the Company's recognizing such transfer, each transferee or assignee shall agree in writing to be subject to each of the terms of this Agreement by executing and delivering an Adoption Agreement substantially in the form attached hereto as Exhibit A. Upon the execution and delivery of an Adoption Agreement by any transferee, such transferee shall be deemed to be a party hereto as if such transferee were the transferor and such transferee's signature appeared on the signature pages of this Agreement and shall be deemed to be an Investor and Stockholder, or Key Holder and Stockholder, as applicable. The Company shall not permit the transfer of the Shares subject to this Agreement on its books or issue a new certificate representing any such Shares unless and until such transferee shall have complied with the terms of this Section 6.2. Each certificate representing the Shares subject to this Agreement if issued on or after the date of this Agreement shall be endorsed by the Company with the legend set forth in Section 6.12.

6.3. Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

6.4. Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the State of Delaware, without regard to its principles of conflicts of laws.

6.5. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.6. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.7. Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on Schedule A or Schedule B hereto, or to such email address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 6.7. If notice is given to the Company, it shall be sent to Caribou Biosciences, Inc., 2929 7th Street, Suite 105, Berkeley, CA 94710, email: legalnotices@cariboubio.com, Attention: Chief Legal Officer; and a copy (which shall not constitute notice) shall also be sent to Reed Smith LLP, 1901 Avenue of the Stars, Suite 700, Los Angeles, California 90067, email amukhey@reedsmith.com, Attention: Ashok Mukhey, Esq., and if notice is given to Investors, a copy shall also be given to such counsel as may appear with such Investors' address on Schedule A hereto.

(b) Each Investor and Key Holder consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "**DGCL**"), as amended or superseded from time to time, or under this Agreement by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the email address set forth below such Investor's or Key Holder's name on the Schedules hereto, as updated from time to time by notice to the Company or as on the books of the Company. Each Investor and Key Holder agrees to promptly notify the Company of any change in its email address, and the failure to do so shall not affect the foregoing.

6.8. Consent Required to Amend, Terminate or Waive. This Agreement may be amended or terminated and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only by a written instrument executed by (a) the Company; (b) the Key Holders holding a majority of the shares of Common Stock then held by the Key Holders who are then employed by the Company; and (c) the holders of at least a majority of the shares of Common Stock issued or issuable upon conversion of the shares of Preferred Stock held by the Investors (voting as a single class and on an as-converted to Common Stock basis). Notwithstanding the foregoing:

(a) this Agreement may not be amended or terminated and the observance of any term of this Agreement may not be waived with respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, termination or waiver applies to all Investors or Key Holders, as the case may be, in the same fashion;

(b) the consent of the Key Holders shall not be required for any amendment or waiver if such amendment or waiver either (A) is not applicable to the rights of the Key Holders hereunder or (B) does not adversely affect the rights of the Key Holders in a manner that is different than the effect on the rights of the other parties herein;

(c) Schedule A hereto may be amended by the Company from time to time in accordance with Section 1.3 of the Purchase Agreement to add information regarding Additional Purchasers (as defined in the Purchase Agreement) without the consent of the other parties hereto;

(d) any provision hereof may be waived by the waiving party on such party's own behalf, without the consent of any other party;

(e) (i) Section 1.2(a) and Section 1.4(a) of this Agreement (with respect to F-Prime), and this clause (i) shall not be amended or waived without the written consent of F-Prime, (ii) Section 1.2(b)(i) and Section 1.4(a) of this Agreement (with respect to PFM) and this clause (ii) shall not be amended or waived without the written consent of PFM, (iii) Section 1.2(b)(ii) and Section 1.4(a) of this Agreement (with respect to Ridgeback), and this clause (iii) shall not be amended or waived without the written consent of Ridgeback, (iv) the rights of Farallon under Section 1.2(b) and Section 1.4(a) of this Agreement (with respect to Farallon), and this clause (iv) shall not be amended or waived without the written consent of Farallon, (v) Section 1.2(c) of this Agreement and this clause (v) may not be amended, terminated or waived without the prior written consent of the holders of a majority of the shares of Common Stock, (vi) Section 1.2(d) of this Agreement and this clause (vi) shall not be amended, terminated or waived without the prior written consent of the holders of a majority of the shares of Common Stock and Preferred Stock, voting together as a single class on an as-converted to Common Stock basis, and the approval of a majority of the Directors then in office, provided, however, that the right to approve the initial appointment of the Independent Directors shall not amended, terminated or waived without the approval of a majority of the Preferred Directors then in office, and (vii) Section 1.4(a)(i)(B) of this Agreement and this clause (vii) shall not be amended, terminated or waived without the prior written consent of the holders of a majority of the shares of Common Stock and Preferred Stock, voting together as a single class on an as-converted to Common Stock basis and the approval of a majority of the Directors then in office;

(f) Section 3 and Section 3.4 of this Agreement shall not be amended or waived without the written consent of (i) the holders of a majority of the Series B Preferred Stock, voting together as a single class, and (ii) the holders of at least two-thirds (2/3rds) of the Series C Preferred Stock, voting together as a single class; provided, however, that the consent of the holders of the Series B Preferred Stock or the holders of the Series C Preferred Stock, respectively, shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination, or waiver is not directly applicable to the rights of the holders of the Series B Preferred Stock or the holders of the Series C Preferred Stock, as the case may be; and

(g) Section 3.3A(x)(i), Section 3.3(g) (with respect to AbbVie) and this clause (g) (with respect to AbbVie) shall not be amended, terminated, or waived without the written consent of AbbVie Inc.; Section 3.3A(x)(ii) and this clause (g) (with respect to Genus) shall not be amended, terminated, or waived without the written consent of Pig Improvement Company UK Limited; Section 3.3A(x)(iii) and this clause (g) (with respect to Corteva) shall not be amended, terminated, or waived without the written consent of Corteva; and Section 3.3A(x)(iv) and this clause (g) (with respect to Novartis) shall not be amended, terminated, or waived without the written consent of Novartis.

The Company shall give prompt written notice of any amendment, termination, or waiver hereunder to any party that did not consent in writing thereto. Any amendment, termination or waiver effected in accordance with this Section 6.8 shall be binding on each party and all of such party's successors and permitted assigns, whether or not any such party, successor or assignee entered into or approved such amendment, termination or waiver. For purposes of

this Section 6.8, the requirement of a written instrument may be satisfied in the form of an action by written consent of the Stockholders circulated by the Company and executed by the Stockholder parties specified, whether or not such action by written consent makes explicit reference to the terms of this Agreement.

6.9. Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default previously or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.10. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

6.11. Entire Agreement. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated to read in its entirety as set forth in this Agreement. This Agreement (including the Exhibits hereto), and the Restated Certificate and the other Transaction Agreements (as defined in the Purchase Agreement) constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.12. Legend on Share Certificates. Each certificate representing any Shares issued after the date hereof shall be endorsed by the Company with a legend reading substantially as follows:

> "THE SHARES EVIDENCED HEREBY ARE SUBJECT TO A VOTING AGREEMENT, AS MAY BE AMENDED FROM TIME TO TIME, (A COPY OF WHICH MAY BE OBTAINED UPON WRITTEN REQUEST FROM THE COMPANY), AND BY ACCEPTING ANY INTEREST IN SUCH SHARES THE PERSON ACCEPTING SUCH INTEREST SHALL BE DEEMED TO AGREE TO AND SHALL BECOME BOUND BY ALL THE PROVISIONS OF THAT VOTING AGREEMENT, INCLUDING CERTAIN RESTRICTIONS ON TRANSFER AND OWNERSHIP SET FORTH THEREIN."

The Company, by its execution of this Agreement, agrees that it will cause the certificates evidencing the Shares issued after the date hereof to bear the legend required by this Section 6.12 of this Agreement, and it shall supply, free of charge, a copy of this Agreement to any holder of a certificate evidencing Shares upon written request from such holder to the Company at its principal office. The parties to this Agreement do hereby agree that the failure to cause the certificates evidencing the Shares to bear the legend required by this Section 6.12 herein and/or the failure of the Company to supply, free of charge, a copy of this Agreement as provided hereunder shall not affect the validity or enforcement of this Agreement.

6.13. Stock Splits, Stock Dividends, etc. In the event of any issuance of Shares of the Company's voting securities hereafter to any of the Stockholders (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like), such Shares shall become subject to this Agreement and shall be endorsed with the legend set forth in Section 6.12.

6.14. Manner of Voting. The voting of Shares pursuant to this Agreement may be effected in person, by proxy, by written consent or in any other manner permitted by applicable law. For the avoidance of doubt, voting of the Shares pursuant to the Agreement need not make explicit reference to the terms of this Agreement.

6.15. Further Assurances. At any time or from time to time after the date hereof, the parties agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments

or documents and to take all such further action as the other party may reasonably request in order to evidence or effectuate the consummation of the transactions contemplated hereby and to otherwise carry out the intent of the parties hereunder.

6.16. Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.17. Costs of Enforcement. If any party to this Agreement seeks to enforce its rights under this Agreement by legal proceedings, the non-prevailing party shall pay all costs and expenses incurred by the prevailing party, including, without limitation, all reasonable attorneys' fees.

6.18. Aggregation of Stock. All Shares held or acquired by a Stockholder and/or its Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement, and such Affiliated Persons may apportion such rights as among themselves in any manner they deem appropriate.

6.19. Spousal Consent. If any individual Stockholder is married on the date of this Agreement and resides in a community property state, such Stockholder's spouse shall execute and deliver to the Company a consent of spouse in the form of Exhibit B hereto ("**Consent of Spouse**"), effective on the date hereof. Notwithstanding the execution and delivery thereof, such consent shall not be deemed to confer or convey to the spouse any rights in such Stockholder's Shares that do not otherwise exist by operation of law or the agreement of the parties. If any individual Stockholder should marry or remarry subsequent to the date of this Agreement, such Stockholder shall within thirty (30) days thereafter obtain his/her new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement by causing such spouse to execute and deliver a Consent of Spouse acknowledging the restrictions and obligations contained in this Agreement and agreeing and consenting to the same.

6.20. Tekla Funds. A copy of the Declaration of Trust, as amended and restated, for each of Tekla Healthcare Investors and Tekla Life Sciences Investors (together, the "**Tekla Funds**") is on file with the Secretary of State of The Commonwealth of Massachusetts, and notice is hereby given that this Agreement is executed on behalf of the Tekla Funds by an officer or trustee of the Tekla Funds in his or her capacity as an officer or trustee of the Tekla Funds, and not individually and that the obligations of or arising out of this Agreement are not binding upon any of the trustees, officers or shareholders individually but are binding only upon the assets and property of each of the respective Tekla Funds.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

COMPANY:

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

PFM HEALTH SCIENCES, LP

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: Chief Financial Officer

INVESTORS:

PFM HEALTHCARE MASTER FUND, L.P.

By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBoard
Title: Chief Financial Officer

PARTNER INVESTMENTS, L.P.,

By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBoard
Title: Chief Financial Officer

PFM HEALTHCARE GROWTH EQUITY HOLDINGS I, LLC

By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBoard
Title: Chief Financial Officer

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

ZONE III HEALTHCARE HOLDINGS, LLC

By: Farallon Capital Management , L.L.C., its Manager

By: /s/ Philip Dreyfuss
Name: Philip Dreyfuss
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

RIDGEBACK CAPITAL INVESTMENTS LP
by RIDGEBACK CAPITAL MANAGEMENT LLC its
Fund Manager:

By: /s/ Christian Sheldon
Name: Christian Sheldon
Title: COO

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

AbbVie Inc.

By: /s/ Adam Houghton
Name: Adam Houghton
Title: VP & Head, AbbVie Ventures

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

MAVERICK VENTURES INVESTMENT FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

MAVERICK ADVISORS FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Adage Capital Partners, LP
By: Adage Capital Partners, GP, LLC, it's General Partner
By: Adage Capital Advisors, LLC, it's Managing Member

By: /s/ Dan Lehan
Name: Dan Lehan
Title: Chief Operating Officer

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Monashee Solitario Fund LP

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

DS Liquid Div RVA MON LLC

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Janus Henderson Capital Funds plc on behalf of its series Janus Henderson Global Life Sciences Fund

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

Janus Henderson Biotech Innovation Master Fund Limited

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

LLS TAP, LLC

By: /s/ Louis DeGennaro
Name: Louis DeGennaro
Title: President & CEO

By: /s/ Gordon Miller
Name: Gordon Miller
Title: EVP & CFO

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

AngelList-Cces-Fund, a series of AngelList-JR-Funds, LLC

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

AngelList-Cces-PR-Fund, a series of AngelList-JR-Funds, LLC

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Central Valley Administrators, Inc.

By: /s/ Richard Merkin
Name: Richard Merkin
Title: President

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

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INVESTORS:

CAROLEM CAPITAL LLC

By: /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

NRG CAPITAL HOLDINGS LLC

By: /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Tekla Healthcare Investors*

By: /s/ Daniel R. Omstead
Name: Daniel R. Omstead
Title: President

* The name Tekla Healthcare Investors is the designation of the Trustees for the time being under an Amended & Restated Declaration of Trust dated April 21, 1987, as amended, and all persons dealing with Tekla Healthcare Investors must look solely to the trust property for the enforcement of any claim against Tekla Healthcare Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Healthcare Investors.

Tekla Life Sciences Investors*

By: /s/ Daniel R. Omstead
Name: Daniel R. Omstead
Title: President

* The name Tekla Life Sciences Investors is the designation of the Trustees for the time being under a Declaration of Trust dated February 20, 1992, as amended, and all persons dealing with Tekla Life Sciences Investors must look solely to the trust property for the enforcement of any claim against Tekla Life Sciences Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Life Sciences Investors.

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

PONTIFAX GLOBAL FOOD AND AGRICULTURE TECHNOLOGY FUND, L.P.

By: /s/ Benjamin Belldegrun
Name: Benjamin Belldegrun
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Point72 Biotech Private Investments, LLC

By: /s/ Vincent Tortorella
Name: Vincent Tortorella
Title: Authorized Signatory

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Jenny Rooke

By: /s/ Jenny Rooke

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

WS Investment Company, LLC (21A)

By: /s/ James Terranova
Name:
Title:

WS Investment Company, LLC (2014A)

By: /s/ James Terranova
Name:
Title:

WS Investment Company, LLC (2015A)

By: /s/ James Terranova
Name:
Title:

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Pig Improvement UK Limited

By: /s/ Stephen Wilson
Name: Stephen Wilson
Title: CEO

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

James and Jennifer Doudna Cate Living Trust DTD 01/02/2014

By: /s/ Jennifer Doudna
Name: Jennifer Doudna
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Rodolphe and Lisa Barrangou

By: /s/ Rodolphe Barrangou

By: /s/ Lisa Barrangou

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

James Berger & Marian Feldman

By: /s/ James Berger

By: /s/ Marian Feldman

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

E. I. du Pont de Nemours and Company

By: /s/ George J. Duko
Name: George J. Duko
Title: Vice President, Mergers & Acquistions

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

LifeSci Venture Partners II, LP

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

LifeSci Venture Master SPV, LLC

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Pacific Continental Investment Company, LLC

By: /s/ Marc Stridiron
Name: Marc Stridiron
Title: Portfolio Manager

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Mintz Levin Special Investments Fund LLC

By: /s/ Megan N. Gates
Name: Megan N. Gates
Title: Member

Mintz Levin Special Investments Fund LLC - Series FY21

By: /s/ Megan N. Gates
Name: Megan N. Gates
Title: Member

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Anterra F&A Ventures I Coöperatief U.A.

By: /s/ Adam Anders
Name: Adam Anders
Title: Director

By: /s/ Maarten Goossens
Name: Maarten Goossens
Title: Director

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

F-PRIME CAPITAL PARTNERS HEALTHCARE FUND IV LP

By: F-Prime Capital Partners Healthcare Advisors Fund IV LP, its General Partner
By: Impresa Holdings LLC, its General Partner
By: Impresa Management LLC, its Managing Member

By: /s/ Mary Bevelock Pendergast
Name: Mary Bevelock Pendergast
Title: Vice President

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Novartis Institutes for BioMedical Research, Inc.

By: /s/ Scott A. Brown
Name: Scott A. Brown
Title: VP CAO

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED VOTING AGREEMENT

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Zachary A. Robbins Trust dtd December 31, 1987

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Robbins Family Trust of 1986

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Avidity Master Fund LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

Avidity Capital Fund II LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Lucas Hamilton Robbins Trust dtd November 17, 1997

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

Avego Bioscience Capital, L.P.
By: Avego Bioscience Capital GP, LLC, its general partner

By: /s/ James Flexner
Name: James Flexner
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

INVUS PUBLIC EQUITIES, L.P.

By: /s/ Raymond Debbane
Name: Raymond Debbane
Title: President of its General Partner

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

CA Fund I, a series of 5 Prime Ventures, LP
By: Fund GP, LLC its General Partner
By: Belltower Fund Group, Ltd. Manager of the General Partner

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

INVESTORS:

HEALTHCARE INNOVATION INVESTMENT FUND LLC

By: /s/ Joseph R. Gentile
Name: Joseph R. Gentile
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Third Amended and Restated Voting Agreement** as of the date first written above.

KEY HOLDER:

By: /s/ James Berger
James Berger

By: /s/ Jennifer Doudna
Jennifer Doudna

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz

By: /s/ Martin Jinek
Martin Jinek

By: _____
Andrew May

SCHEDULE A

INVESTORS

SCHEDULE B

KEY HOLDERS

EXHIBIT A

ADOPTION AGREEMENT

This Adoption Agreement ("**Adoption Agreement**") is executed on , 20 , by the undersigned (the "**Holder**") pursuant to the terms of that certain Third Amended and Restated Voting Agreement, dated as of , 2021 (the "**Agreement**"), by and among the Company and certain of its Stockholders, as such Agreement may be amended or amended and restated hereafter. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, the Holder agrees as follows.

1.1 Acknowledgement. Holder acknowledges that Holder is acquiring certain shares of the capital stock of the Company (the "**Stock**") or options, warrants or other rights to purchase such Stock (the "**Options**"), for one of the following reasons (Check the correct box):

☐ as a transferee of Shares from a party in such party's capacity as an "Investor" bound by the Agreement, and after such transfer, Holder shall be considered an "Investor" and a "Stockholder" for all purposes of the Agreement.

☐ as a transferee of Shares from a party in such party's capacity as a "Key Holder" bound by the Agreement, and after such transfer, Holder shall be considered a "Key Holder" and a "Stockholder" for all purposes of the Agreement.

☐ as a new Investor in accordance with Section 6.1(a) of the Agreement, in which case Holder will be an "Investor" and a "Stockholder" for all purposes of the Agreement.

☐ in accordance with Section 6.1(b) of the Agreement, as a new party who is not a new Investor, in which case Holder will be a "Stockholder" for all purposes of the Agreement.

1.2 Agreement. Holder hereby (a) agrees that the Stock Options, and any other shares of capital stock or securities required by the Agreement to be bound thereby, shall be bound by and subject to the terms of the Agreement and (b) adopts the Agreement with the same force and effect as if Holder were originally a party thereto.

1.3 Notice. Any notice required or permitted by the Agreement shall be given to Holder at the address or facsimile number listed below Holder's signature hereto.

HOLDER: _____

By: _____
Name and Title of Signatory

Address: _____

_____

Facsimile Number: _____

ACCEPTED AND AGREED:

CARIBOU BIOSCIENCES, INC.

By: _____

Title: _____

EXHIBIT B

CONSENT OF SPOUSE

I, , spouse of , acknowledge that I have read the Third Amended and Restated Voting Agreement, dated as of , 2021 (the "**Agreement**"), to which this Consent is attached as Exhibit B and that I know the contents of the Agreement. I am aware that the Agreement contains provisions regarding the voting and transfer of shares of capital stock of the Company that my spouse may own, including any interest I might have therein.

I hereby agree that my interest, if any, in any shares of capital stock of the Company subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in such shares of capital stock of the Company shall be similarly bound by the Agreement.

I am aware that the legal, financial and related matters contained in the Agreement are complex and that I am free to seek independent professional guidance or counsel with respect to this Consent. I have either sought such guidance or counsel or determined after reviewing the Agreement carefully that I will waive such right.

Dated: _____

_____
Name:

Exhibit 10.61

FIRST AMENDMENT TO

THIRD AMENDED AND RESTATED VOTING AGREEMENT

This First Amendment to Third Amended and Restated Voting Agreement (this "Amendment"), effective as of March 29, 2021, is made by and among Caribou Biosciences, Inc., a Delaware corporation (the "**Company**"), PFM Health Sciences, LP and certain stockholders of the Company with reference to that certain Third Amended and Restated Voting Agreement dated as of March 2, 2021 (the "**Voting Agreement**") by and among the holders of the Company's Series A Preferred Stock, $0.0001 par value per share ("**Series A Preferred Stock**"), the holders of the Company's Series A-1 Preferred Stock, $0.0001 par value per share (**"Series A-1 Preferred Stock**"), the holders of the Company's Series B Preferred Stock, $0.0001 par value per share (the "**Series B Preferred Stock**"), the holders of the Company's Series C Preferred Stock, $0.0001 par value per share (the "**Series C Preferred Stock**;" and referred to herein collectively with the Series A Preferred Stock, the Series A-1 Preferred Stock, and the Series B Preferred Stock, the "**Preferred Stock;**" the holders of the Preferred Stock collectively are referred to herein as the "**Investors**"), and certain other stockholders of the Company (the "**Key Holders;**" and together collectively with the Investors, the "**Stockholders**"). Capitalized terms not otherwise defined in this Amendment shall have the meanings ascribed to them in the Voting Agreement (without giving effect to this Amendment).

RECITALS

A. The Fourth Amended and Restated Certificate of Incorporation of the Company provides that the holders of record of the Series A Preferred Stock, Series A-1 Preferred Stock and Series B Preferred Stock, exclusively and as a single separate class on an as-converted to Common Stock basis, are entitled to elect one (1) director of the Company (the "**Series A/A-1/B Preferred Director**").

B. The Voting Agreement, among other things, grants F-Prime Capital Partners Healthcare Fund IV LP ("**F-Prime**") the right, for so long as F-Prime and its Affiliates (as defined in the Voting Agreement) continue to own beneficially at least 1,019,692 shares of the Common Stock, par value $0.0001 per share, of the Company (the "**Common Stock**"), including shares of Common Stock issued or issuable upon conversion of the Series A-1 Preferred Stock), to designate the individual to serve as the Series A/A-1/B Preferred Director (the "**Series A/A-1/B Designee**").

B. The Company and the Stockholders, at the request of F-Prime, desire to amend the Voting Agreement to provide that the Series A/A-1/B Designee be designated by management of the Company and approved by a majority of the remaining Board members, in lieu of designation by F-Prime.

D. Pursuant to Section 6.8 of the Voting Agreement, (i) the Voting Agreement may be amended, waived, discharged or terminated only by a written instrument executed by (1) the Company; (2) the Key Holders holding a majority of the shares of Common Stock then held by the Key Holders who are then employed by the Company; and (3) the holders of at least a majority of the shares of Common Stock issued or issuable upon conversion of the shares of Preferred Stock held by the Investors (voting as a single class and on an as-converted to Common Stock basis) and (ii) notwithstanding the foregoing, Section 1.2(a), Section 1.4(a) (with respect to F-Prime), and clause (i) of Section 6.8(e) of the Voting Agreement may not be amended or waived without the written consent of F-Prime.

E. The Company and the Stockholders (including F-Prime) desire to amend the Voting Agreement consistent with the above and the undersigned hold the requisite vote to so amend the Voting Agreement, which amendment shall be binding on all parties to the Voting Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises hereinafter set forth, the parties hereto agree as follows:

1. Amendments to the Voting Agreement. The following amendments to the Voting Agreement shall become effective on March 30, 2021 subsequent to the resignation on such date of Robert Weisskoff as a director of the Company:

(a) Section 1.2(a) of the Voting Agreement is hereby amended and restated to read in its entirety as follows:

> "One (1) person elected by a majority in interest of the holders of the Series A Preferred Stock, the Series A-1 Preferred Stock and the Series B Preferred Stock, voting together as a single class on an as-converted to Common Stock basis (the "**Series A/A-1/B Designee**"), who shall be designated by management of the Company and approved by a majority of the other Board members. Following the resignation of Robert Weisskoff as a director of the Company, the Series A/A-1/B Designee seat shall initially be vacant;"

(b) Section 6.8(e)(i) of the Voting Agreement is hereby amended and restated to read in its entirety as follows:

> "(e) (i) Section 1.2(a) and Section 1.4(a) (with respect to the Series A/A-1/B Designee or the persons having the power to designate the Series A/A-1/B Designee) of this Agreement and this clause (i) shall not be amended or waived without the prior written consent of a majority in interest of the holders of the Series A Preferred Stock, the Series A-1 Preferred Stock, and the Series B Preferred Stock, voting together as a single class on an as-converted to Common Stock basis,"

2. No Further Amendment. Except as herein provided, the Voting Agreement is not being amended or otherwise modified and shall in all other respects remain unchanged and in full force and effect according to its respective terms.

3. Miscellaneous. This Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. This Amendment and any controversy arising out of or relating to this Amendment shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the State of Delaware, without regard to its principles of conflicts of laws.

[*Signature Pages Follow*]

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first written above.

COMPANY:

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

[Signature Page to First Amendment to Third Amended and Restated Voting Agreement]

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first written above.

PFM HEALTH SCIENCES, LP

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: Chief Financial Officer

INVESTORS:

PFM HEALTHCARE MASTER FUND, L.P.

By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: Chief Financial Officer

PARTNER INVESTMENTS, L.P.,

By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: Chief Financial Officer

PFM HEALTHCARE GROWTH EQUITY HOLDINGS I, LLC

By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: Chief Financial Officer

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first written above.

INVESTORS:

ZONE III HEALTHCARE HOLDINGS, LLC

By: Farallon Capital Management, L.L.C., its Manager

By: /s/ Philip Dreyfuss
Name: Philip Dreyfuss
Title: Managing Member

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first written above.

INVESTORS:

RIDGEBACK CAPITAL INVESTMENTS LP

By RIDGEBACK CAPITAL MANAGEMENT LLC its
Fund Manager:

By: /s/ Christian Sheldon
Name: Christian Sheldon
Title: COO

[Signature Page to First Amendment to Third Amended and Restated Voting Agreement]

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first written above.

INVESTORS:

E.I. du Pont de Nemours and Company

By: /s/ George J. Duko
Name: George J. Duko
Title: VP Mergers and Acquisitions

[Signature Page to First Amendment to Third Amended and Restated Voting Agreement]

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first written above.

INVESTORS:

Anterra F&A Ventures I Coöperatief U.A.

By: /s/ Adam Anders
Name: Adam Anders
Title: Director

By: /s/ Maarten Goossens
Name: Maarten Goossens
Title: Director

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first written above.

INVESTORS:

F-PRIME CAPITAL PARTNERS HEALTHCARE FUND IV LP

By: F-Prime Capital Partners Healthcare Advisors Fund IV LP, its General Partner
By: Impresa Holdings LLC, its General Partner
By: Impresa Management LLC, its Managing Member

By: /s/ Mary Bevelock Pendergast
Name: Mary Bevelock Pendergast
Title: Vice President

SECOND AMENDED AND RESTATED
RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT

THIS SECOND AMENDED AND RESTATED RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT (this "**Agreement**") is made as of March 2, 2021 by and among Caribou Biosciences, Inc. a Delaware corporation (the "**Company**"), the Investors listed on Schedule A and the Key Holders listed on Schedule B.

WHEREAS, the Company, the Key Holders and certain of the Investors (the "**Prior Investors**") previously entered into an Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of May 12, 2016 (the "**Prior Agreement**"), in connection with the purchase of shares of Series B Preferred Stock of the Company, par value $0.0001 per share ("**Series B Preferred Stock**");

WHEREAS, the Key Holders, the Prior Investors and the Company desire to induce certain of the Investors to purchase shares of Series C Preferred Stock of the Company, par value $0.0001 per share ("**Series C Preferred Stock**"), pursuant to the Series C Preferred Stock Purchase Agreement dated as of the date hereof by and among the Company and certain of the Investors (the "**Purchase Agreement**"), by amending and restating the Prior Agreement to provide the Investors with the rights and privileges as set forth herein.

NOW, THEREFORE, the Company, the Key Holders and the Investors (including the Prior Investors) each hereby agree to amend and restate the Prior Agreement in its entirety as set forth herein, and the parties hereto further agree as follows:

1. Definitions.

1.1 "**Affiliate**" means, with respect to any specified Investor, any other Investor who, directly or indirectly, controls, is controlled by, or is under common control with such Investor, including, without limitation, any general partner, limited partner, member, manager, managing member, employee, officer or director of such Investor or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or is under common investment management with or shares the same management company with, such Investor. For purposes of this definition, the term "control" when used with respect to any Investor shall mean the power to direct the management or policies of such Investor, directly or indirectly, whether through ownership of voting securities, by contract or otherwise, and the terms "controlling" and "controlled" shall have meanings correlative to the foregoing.

1.2 "**Capital Stock**" means (a) shares of Common Stock and Preferred Stock (whether now outstanding or hereafter issued in any context), (b) shares of Common Stock issued or issuable upon conversion of Preferred Stock and (c) shares of Common Stock issued or issuable upon exercise or conversion, as applicable, of stock options, warrants or other convertible securities of the Company, in each case now owned or subsequently acquired by any Key Holder, any Investor, or their respective successors or permitted transferees or assigns. For purposes of the number of shares of Capital Stock held by an Investor or Key Holder (or any other calculation based thereon), all shares of Preferred Stock shall be deemed to have been converted into Common Stock at the then-applicable conversion ratio.

1.3 "**Change of Control**" means a transaction or series of related transactions in which a person, or a group of related persons, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company.

1.4 "**Common Stock**" means shares of Common Stock of the Company, par value $0.0001 per share.

1.5 "**Company Notice**" means written notice from the Company notifying the selling Key Holders that the Company intends to exercise its Right of First Refusal as to some or all of the Transfer Stock with respect to any Proposed Key Holder Transfer.

1.6 "**Deemed Liquidation Event**" has the meaning ascribed thereto in the Restated Certificate.

1.7 "**Investor Notice**" means written notice from an Investor notifying the Company and the selling Key Holder that such Investor intends to exercise its Secondary Refusal Right as to a portion of the Transfer Stock with respect to any Proposed Key Holder Transfer.

1.8 "**Investors**" means the Persons named on Schedule A hereto, each Person to whom the rights of an Investor are assigned pursuant to Section 6.9, each Person who hereafter becomes a signatory to this Agreement pursuant to Section 6.11 and any one of them, as the context may require.

1.9 "**Key Holders**" means the Persons named on Schedule B hereto, each Person to whom the rights of a Key Holder are assigned pursuant to Section 3.1, each Person who hereafter becomes a signatory to this Agreement pursuant to Section 6.9 or 6.17 and any one of them, as the context may require.

1.10 "**Preferred Stock**" means, collectively, all shares of Series A Preferred Stock, Series A-1 Preferred Stock, Series B Preferred Stock and Series C Preferred Stock.

1.11 "**Proposed Key Holder Transfer**" means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any Transfer Stock (or any interest therein) proposed by any of the Key Holders.

1.12 "**Proposed Transfer Notice**" means written notice from a Key Holder setting forth the terms and conditions of a Proposed Key Holder Transfer.

1.13 "**Prospective Transferee**" means any Person to whom a Key Holder proposes to make a Proposed Key Holder Transfer.

1.14 "**Restated Certificate**" means the Company's Fourth Amended and Restated Certificate of Incorporation, as amended from time to time.

1.15 "**Right of Co-Sale**" means the right, but not an obligation, of an Investor to participate in a Proposed Key Holder Transfer on the terms and conditions specified in the Proposed Transfer Notice.

1.16 "**Right of First Refusal**" means the right, but not an obligation, of the Company, or its permitted transferees or assigns, to purchase some or all of the Transfer Stock with respect to a Proposed Key Holder Transfer, on the terms and conditions specified in the Proposed Transfer Notice.

1.17 "**Secondary Notice**" means written notice from the Company notifying the Investors and the selling Key Holder that the Company does not intend to exercise its Right of First Refusal as to all shares of Transfer Stock with respect to any Proposed Key Holder Transfer.

1.18 "**Secondary Refusal Right**" means the right, but not an obligation, of each Investor to purchase up to its pro rata portion (based upon the total number of shares of Capital Stock then held by all Investors) of any Transfer Stock not purchased pursuant to the Right of First Refusal, on the terms and conditions specified in the Proposed Transfer Notice.

1.19 "**Series A Preferred Stock**" means the Company's Series A Preferred Stock, par value $0.0001 per share.

1.20 "**Series A-1 Preferred Stock**" means the Company's Series A-1 Preferred Stock, par value $0.0001 per share

1.21 "**SPAC Transaction**" means any transaction or series of related transactions in which the Company's outstanding shares of capital stock are exchanged for or otherwise converted into securities that are

publicly listed on a securities exchange (the "**Public Shares**"), including through a merger, acquisition, business combination or similar transaction, in each case with a vehicle commonly known as a special purpose acquisition company (a "**SPAC**").

1.22 "**Transfer Stock**" means shares of Capital Stock owned by a Key Holder, or issued to a Key Holder after the date hereof (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like), but does not include any shares of Preferred Stock or Common Stock issued or issuable upon conversion of Preferred Stock.

1.23 "**Undersubscription Notice**" means written notice from an Investor notifying the Company and the selling Key Holder that such Investor intends to exercise its option to purchase all or any portion of the Transfer Stock not purchased pursuant to the Right of First Refusal or the Secondary Refusal Right.

2. Agreement Among the Company, the Investors and the Key Holders.

2.1 Right of First Refusal.

(a) Grant. Subject to the terms of Section 3 below, each Key Holder hereby unconditionally and irrevocably grants to the Company a Right of First Refusal to purchase all or any portion of Transfer Stock that such Key Holder may propose to transfer in a Proposed Key Holder Transfer, at the same price and on the same terms and conditions as those offered to the Prospective Transferee.

(b) Notice. Each Key Holder proposing to make a Proposed Key Holder Transfer must deliver a Proposed Transfer Notice to the Company and each Investor not later than thirty (30) days prior to the consummation of such Proposed Key Holder Transfer. Such Proposed Transfer Notice shall contain the material terms and conditions (including price and form of consideration) of the Proposed Key Holder Transfer and the identity of the Prospective Transferee (and a description of such Key Holder's relationship to or affiliation with the Prospective Transferee). To exercise its Right of First Refusal under this Section 2, the Company must deliver a Company Notice to the selling Key Holder within twenty (20) days after delivery of the Proposed Transfer Notice. In the event of a conflict between this Agreement and any other agreement that may have been entered into by a Key Holder with the Company that contains a preexisting right of first refusal, the Company and the Key Holder acknowledge and agree that the terms of this Agreement shall control and the preexisting right of first refusal shall be deemed satisfied by compliance with Section 2.1(a) and this Section 2.1(b).

(c) Grant of Secondary Refusal Right to Investors. Subject to the terms of Section 3 below, each Key Holder hereby unconditionally and irrevocably grants to the Investors a Secondary Refusal Right to purchase all or any portion of the Transfer Stock not purchased by the Company pursuant to the Right of First Refusal described in Section 2.1(b) above, as provided in this Section 2.1(c). If the Company does not intend to exercise its Right of First Refusal with respect to all Transfer Stock subject to a Proposed Key Holder Transfer, the Company must deliver a Secondary Notice to the selling Key Holder and to each Investor to that effect no later than twenty (20) days after the selling Key Holder delivers the Proposed Transfer Notice to the Company. To exercise its Secondary Refusal Right, an Investor must deliver an Investor Notice to the selling Key Holder and the Company within ten (10) days after the Company's deadline for its delivery of the Secondary Notice as provided in the preceding sentence.

(d) Undersubscription of Transfer Stock. If options to purchase have been exercised by the Company and the Investors with respect to some but not all of the Transfer Stock by the end of the 10-day period specified in the last sentence of Section 2.1(c) (the "**Investor Notice Period**"), then the Company shall, immediately after the expiration of the Investor Notice Period, send written notice (the "**Company Undersubscription Notice**") to those Investors who fully exercised their Secondary Refusal Right within the Investor Notice Period (the "**Exercising Investors**"). Each Exercising Investor shall, subject to the provisions of this Section 2.1(d), have an additional option to purchase all or any part of the balance of any such remaining unsubscribed shares of Transfer Stock on the terms and conditions set forth in the Proposed Transfer Notice. To exercise such option, an Exercising Investor must deliver an Undersubscription Notice to the selling Key Holder and the Company within ten (10) days after the expiration of the Investor Notice Period. In the event there are two (2) or

more such Exercising Investors that choose to exercise the last-mentioned option for a total number of remaining shares in excess of the number available, the remaining shares available for purchase under this Section 2.1(d) shall be allocated to such Exercising Investors pro rata based on the number of shares of Transfer Stock such Exercising Investors have elected to purchase pursuant to the Secondary Refusal Right (without giving effect to any shares of Transfer Stock that any such Exercising Investor has elected to purchase pursuant to the Company Undersubscription Notice). If the options to purchase the remaining shares are exercised in full by the Exercising Investors, the Company shall immediately notify all of the Exercising Investors and the selling Key Holder of that fact.

(e) Consideration; Closing. If the consideration proposed to be paid for the Transfer Stock is in property, services or other non-cash consideration, the fair market value of the consideration shall be as determined in good faith by the Company's Board of Directors (the "**Board of Directors**") and as set forth in the Company Notice. If the Company or any Investor cannot for any reason pay for the Transfer Stock in the same form of non-cash consideration, the Company or such Investor may pay the cash value equivalent thereof, as determined in good faith by the Board of Directors and as set forth in the Company Notice. The closing of the purchase of Transfer Stock by the Company and the Investors shall take place, and all payments from the Company and the Investors shall have been delivered to the selling Key Holder, by the later of (i) the date specified in the Proposed Transfer Notice as the intended date of the Proposed Key Holder Transfer and (ii) forty-five (45) days after delivery of the Proposed Transfer Notice.

2.2 Right of Co-Sale.

(a) Exercise of Right. If any Transfer Stock subject to a Proposed Key Holder Transfer is not purchased pursuant to Section 2.1 above and thereafter is to be sold to a Prospective Transferee, each respective Investor may elect to exercise its Right of Co-Sale and participate on a pro rata basis in the Proposed Key Holder Transfer as set forth in Section 2.2(b) below and, subject to Section 2.2(d), otherwise on the same terms and conditions specified in the Proposed Transfer Notice. Each Investor who desires to exercise its Right of Co-Sale (each, a "**Participating Investor**") must give the selling Key Holder written notice to that effect within fifteen (15) days after the deadline for delivery of the Secondary Notice described above, and upon giving such notice such Participating Investor shall be deemed to have effectively exercised the Right of Co-Sale.

(b) Shares Includable. Each Participating Investor may include in the Proposed Key Holder Transfer all or any part of such Participating Investor's Capital Stock equal to the product obtained by multiplying (i) the aggregate number of shares of Transfer Stock subject to the Proposed Key Holder Transfer (excluding shares purchased by the Company or the Participating Investors pursuant to the Right of First Refusal or the Secondary Refusal Right) by (ii) a fraction, the numerator of which is the number of shares of Capital Stock owned by such Participating Investor immediately before consummation of the Proposed Key Holder Transfer (excluding any shares that such Investor has agreed to purchase pursuant to the Secondary Refusal Right) and the denominator of which is the total number of shares of Capital Stock owned, in the aggregate, by all Participating Investors immediately prior to the consummation of the Proposed Key Holder Transfer (excluding any shares that all Participating Investors have collectively agreed to purchase pursuant to the Secondary Refusal Right), plus the number of shares of Transfer Stock held by the selling Key Holder. To the extent one or more of the Participating Investors exercise such right of participation in accordance with the terms and conditions set forth herein, the number of shares of Transfer Stock that the selling Key Holder may sell in the Proposed Key Holder Transfer shall be correspondingly reduced.

(c) Purchase and Sale Agreement. The Participating Investors and the selling Key Holder agree that the terms and conditions of any Proposed Key Holder Transfer in accordance with Section 2.2 will be memorialized in, and governed by, a written purchase and sale agreement with the Prospective Transferee (the "**Purchase and Sale Agreement**") with customary terms and provisions for such a transaction, and the Participating Investors and the selling Key Holder further covenant and agree to enter into such Purchase and Sale Agreement as a condition precedent to any sale or other transfer in accordance with this Section 2.2.

(d) Allocation of Consideration.

(i) Subject to Section 2.2(d)(ii), the aggregate consideration payable to the Participating Investors and the selling Key Holder shall be allocated based on the number of shares of Capital Stock sold to the Prospective Transferee by each Participating Investor and the selling Key Holder as provided in Section 2.2(b), provided, that if a Participating Investor wishes to sell Preferred Stock, the price set forth in the Proposed Transfer Notice shall be appropriately adjusted based on the conversion ratio of the Preferred Stock into Common Stock.

(ii) In the event that the Proposed Key Holder Transfer constitutes a Change of Control, the terms of the Purchase and Sale Agreement shall provide that the aggregate consideration from such transfer shall be allocated to the Participating Investors and the selling Key Holder in accordance with Sections 2.1 and 2.2 of Article FOURTH, Part (B) of the Restated Certificate as if (A) such transfer were a Deemed Liquidation Event (as defined in the Restated Certificate), and (B) the Capital Stock sold in accordance with the Purchase and Sale Agreement were the only Capital Stock outstanding. In the event that a portion of the aggregate consideration payable to the Participating Investor(s) and selling Key Holder is placed into escrow and/or is payable only upon satisfaction of contingencies, the Purchase and Sale Agreement shall provide that (x) the portion of such consideration that is not placed in escrow and is not subject to contingencies (the "**Initial Consideration**") shall be allocated in accordance with Sections 2.1 and 2.2 of Article FOURTH, Part (B) of the Restated Certificate as if the Initial Consideration were the only consideration payable in connection with such transfer, and (y) any additional consideration which becomes payable to the Participating Investor(s) and selling Key Holder upon release from escrow or satisfaction of such contingencies shall be allocated in accordance with Sections 2.1 and 2.2 of Article FOURTH, Part (B) of the Restated Certificate after taking into account the previous payment of the Initial Consideration as part of the same transfer.

(e) Purchase by Selling Key Holder; Deliveries. Notwithstanding Section 2.2(c) above, if any Prospective Transferee or Transferees refuse(s) to purchase securities subject to the Right of Co-Sale from any Participating Investor or Investors or upon the failure to negotiate in good faith a Purchase and Sale Agreement reasonably satisfactory to the Participating Investors, no Key Holder may sell any Transfer Stock to such Prospective Transferee or Transferees unless and until, simultaneously with such sale, such Key Holder purchases all securities subject to the Right of Co-Sale from such Participating Investor or Investors on the same terms and conditions (including the proposed purchase price) as set forth in the Proposed Transfer Notice and as provided in Section 2.2(d)(i); provided, however, if such sale constitutes a Change of Control, the portion of the aggregate consideration paid by the selling Key Holder to such Participating Investor or Investors shall be made in accordance with the first sentence of Section 2.2(d)(ii). In connection with such purchase by the selling Key Holder, such Participating Investor or Investors shall deliver to the selling Key Holder a stock certificate or certificates, properly endorsed for transfer, representing the Capital Stock being purchased by the selling Key Holder. Each such stock certificate delivered to the selling Key Holder will be transferred to the Prospective Transferee against payment therefor in consummation of the sale of the Transfer Stock pursuant to the terms and conditions specified in the Proposed Transfer Notice, and the selling Key Holder shall concurrently therewith remit or direct payment to each such Participating Investor the portion of the aggregate consideration to which each such Participating Investor is entitled by reason of its participation in such sale as provided in this Section 2.2(e).

(f) Additional Compliance. If any Proposed Key Holder Transfer is not consummated within sixty (60) days after receipt of the Proposed Transfer Notice by the Company, the Key Holders proposing the Proposed Key Holder Transfer may not sell any Transfer Stock unless they first comply in full with each provision of this Section 2. The exercise or election not to exercise any right by any Investor hereunder shall not adversely affect its right to participate in any other sales of Transfer Stock subject to this Section 2.2.

2.3 Effect of Failure to Comply.

(a) Transfer Void; Equitable Relief. Any Proposed Key Holder Transfer not made in compliance with the requirements of this Agreement shall be null and void ab initio, shall not be recorded on the books of the Company or its transfer agent and shall not be recognized by the Company. Each party hereto acknowledges and agrees that any breach of this Agreement would result in substantial harm to the other parties hereto for which monetary damages alone could not adequately compensate. Therefore, the parties hereto unconditionally and irrevocably agree that any non-breaching party hereto shall be entitled to seek protective orders,

injunctive relief and other remedies available at law or in equity (including, without limitation, seeking specific performance or the rescission of purchases, sales and other transfers of Transfer Stock not made in strict compliance with this Agreement).

(b) Violation of First Refusal Right. If any Key Holder becomes obligated to sell any Transfer Stock to the Company or any Investor under this Agreement and fails to deliver such Transfer Stock in accordance with the terms of this Agreement, the Company and/or such Investor may, at its option, in addition to all other remedies it may have, send to such Key Holder the purchase price for such Transfer Stock as is herein specified and transfer to the name of the Company or such Investor (or request that the Company effect such transfer in the name of an Investor) on the Company's books the certificate or certificates representing the Transfer Stock to be sold.

(c) Violation of Co-Sale Right. If any Key Holder purports to sell any Transfer Stock in contravention of the Right of Co-Sale (a "**Prohibited Transfer**"), each Investor who desires to exercise its Right of Co-Sale under Section 2.2 may, in addition to such remedies as may be available by law, in equity or hereunder, require such Key Holder to purchase from such Investor the type and number of shares of Capital Stock that such Investor would have been entitled to sell to the Prospective Transferee under Section 2.2 had the Prohibited Transfer been effected pursuant to and in compliance with the terms of Section 2.2. The sale will be made on the same terms, including, without limitation, as provided in Section 2.2(d)(i) and the first sentence of Section 2.2(d)(ii), as applicable, and subject to the same conditions as would have applied had the Key Holder not made the Prohibited Transfer, except that the sale (including, without limitation, the delivery of the purchase price) must be made within ninety (90) days after the Investor learns of the Prohibited Transfer, as opposed to the timeframe proscribed in Section 2.2. Such Key Holder shall also reimburse each Investor for any and all reasonable and documented out-of-pocket fees and expenses, including reasonable legal fees and expenses, incurred pursuant to the exercise or the attempted exercise of the Investor's rights under Section 2.2.

3. Exempt Transfers.

3.1 Exempted Transfers. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Sections 2.1 and 2.2 shall not apply: (a) in the case of a Key Holder that is an entity, upon a transfer by such Key Holder to its stockholders, members, partners or other equity holders; (b) to a repurchase of Transfer Stock from a Key Holder by the Company at a price no greater than that originally paid by such Key Holder for such Transfer Stock and pursuant to an agreement containing vesting and/or repurchase provisions approved by a majority of the Board of Directors; or (c) in the case of a Key Holder that is a natural person, upon a transfer of Transfer Stock by such Key Holder made for bona fide estate planning purposes, either during his or her lifetime or on death by will or intestacy to his or her spouse, child (natural or adopted), or any other direct lineal descendant of such Key Holder (or his or her spouse) (all of the foregoing collectively referred to as "**family members**"), or any custodian or trustee of any trust, partnership or limited liability company solely for the benefit of, or the ownership interests of which are owned wholly by, such Key Holder or any such family members; provided that in the case of clause(s) (a) or (c), the Key Holder shall deliver prior written notice to the Investors of such gift or transfer and such shares of Transfer Stock shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such transfer, deliver a counterpart signature page to this Agreement as confirmation that such transferee shall be bound by all the terms and conditions of this Agreement as a Key Holder (but only with respect to the securities so transferred to the transferee), including the obligations of a Key Holder with respect to Proposed Key Holder Transfers of such Transfer Stock pursuant to Section 2; and provided, further, in the case of any transfer pursuant to clause (a) or (c) above, that such transfer is made pursuant to a transaction in which there is no consideration actually paid for such transfer.

3.2 Exempted Offerings. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Section 2 shall not apply to the sale of any Transfer Stock (a) to the public in an offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (a "**Public Offering**") or (b) pursuant to a Deemed Liquidation Event.

3.3 Prohibited Transferees. Notwithstanding the foregoing, no Key Holder shall transfer any Transfer Stock to (a) any entity that, in the determination of the Board of Directors, directly or indirectly competes with the Company; provided, however, that, for purposes of this Section 3.3, in no event shall the Board of Directors

determine that Pig Improvement Company UK Limited ("**PIC**"), Anterra F&A Ventures I Coöperatief U.A. ("**Anterra**"), F-Prime Capital Partners Healthcare Fund IV LP ("**F-Prime**"), Novartis Institutes for BioMedical Research, Inc. ("**Novartis**"), E. I. du Pont de Nemours and Company ("**DuPont**"), PFM Healthcare Master Fund, L.P., Partner Investments, L.P., PFM Healthcare Growth Equity Holdings I, LLC ("**PFM**"), and its Affiliate funds, Zone III Healthcare Holdings, LLC ("**Farallon**") and its Affiliate funds, Ridgeback Capital Management ("**Ridgeback**") and its Affiliate funds, or AbbVie Inc. ("**AbbVie**") or AbbVie Manufacturing Management Unlimited Company (as long as it remains an Affiliate of AbbVie) directly or indirectly competes with the Company or (b) any customer, distributor or supplier of the Company (which, for the avoidance of doubt shall not include AbbVie), if the Company's Board of Directors should determine that such transfer would result in such customer, distributor or supplier receiving information that would place the Company at a competitive disadvantage with respect to such customer, distributor or supplier.

4. Legend. Each certificate representing shares of Transfer Stock held by the Key Holders or issued to any permitted transferee in connection with a transfer permitted by Section 3.1 hereof shall be endorsed with the following legend:

> THE SALE, PLEDGE, HYPOTHECATION OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO, AND IN CERTAIN CASES PROHIBITED BY, THE TERMS AND CONDITIONS OF A CERTAIN RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT BY AND AMONG THE STOCKHOLDER, THE CORPORATION AND CERTAIN OTHER HOLDERS OF STOCK OF THE CORPORATION. COPIES OF SUCH AGREEMENT MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE CORPORATION.

Each Key Holder agrees that the Company may instruct its transfer agent to impose transfer restrictions on the shares represented by certificates bearing the legend referred to in this Section 4 above to enforce the provisions of this Agreement, and the Company agrees to promptly do so. The legend shall be removed upon termination or expiration of the restrictions set forth in this Agreement at the request of the holder.

5. Lock-Up.

5.1 Agreement to Lock-Up.

(a) Each Key Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Company's initial public offering (the "**IPO**") and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days, which period may be extended upon the request of the managing underwriter for an additional period of up to fifteen (15) days to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto) (a) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Capital Stock held immediately before the effective date of the registration statement for the IPO (excluding any shares purchased in connection with or conditioned on the IPO and any securities acquired following the effective date of the registration statement for the IPO) or (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Capital Stock, whether any such transaction described in clause (a) or (b) above is to be settled by delivery of Capital Stock or other securities, in cash or otherwise. The foregoing provisions of this Section 5.1 shall only apply to the IPO and shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Key Holder or the immediate family of the Key Holder (provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein and provided, further that any such transfer shall not involve a disposition for value), and shall only be applicable to the Key Holders if all officers and directors are subject to the same restrictions and the Company uses commercially reasonable efforts to obtain a similar agreement from all holders of more than one percent (1%) of the outstanding Common Stock (after giving effect to the conversion into

Common Stock of all outstanding Preferred Stock). The underwriters in connection with the IPO are intended third-party beneficiaries of this Section 5 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Key Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in the IPO (or any other registration, as applicable) that are consistent with this Section 5 or that are necessary to give further effect thereto.

(b) In connection with a SPAC Transaction, each Key Holder agrees to enter into an agreement with the SPAC or the Company to not transfer the Public Shares received by such Key Holder in connection with the SPAC Transaction (excluding any Public Shares received in exchange for or upon conversion of securities issued in a private placement that is connected to or conditioned on the SPAC Transaction) pursuant to terms substantially similar to the terms in Section 5.1(a) (modified as appropriate for a SPAC Transaction).

5.2 Stop Transfer Instructions. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the shares of Capital Stock of each Key Holder (and transferees and assignees thereof) until the end of such restricted period.

6. Miscellaneous.

6.1 Term. This Agreement shall automatically terminate upon the earliest of (a) immediately prior to the consummation of the Company's IPO, (b) immediately prior to the consummation of a SPAC Transaction (as defined in the Restated Certificate), and (c) the consummation of a Deemed Liquidation Event, provided that the provisions of Section 6 will survive any such event.

6.2 Stock Split. All references to numbers of shares in this Agreement shall be appropriately adjusted to reflect any stock dividend, split, combination or other recapitalization affecting the Capital Stock occurring after the date of this Agreement.

6.3 Ownership. Each Key Holder represents and warrants that such Key Holder is the sole legal and beneficial owner of the shares of Transfer Stock subject to this Agreement and that no other person or entity has any interest in such shares (other than a community property interest as to which the holder thereof has acknowledged and agreed in writing to the restrictions and obligations hereunder).

6.4 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.5 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by facsimile or email (with confirmation of receipt) during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on Schedule A or Schedule B hereof, as the case may be, or to such address, email or facsimile number as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, it shall be sent to Caribou Biosciences, Inc., 2929 7th Street, Suite 105, Berkeley, CA 94710, email legalnotices@cariboubio.com, Attention: Chief Legal Officer; and a copy (which shall not constitute notice) shall also be sent to Reed Smith LLP, 1901 Avenue of the Stars, Suite 700, Los Angeles, California 90067, email amukhey@reedsmith.com, Attention: Ashok Mukhey, Esq., and if notice is given to Investors, a copy shall also be given to such counsel as may appear with such Investors' address on Schedule A hereto.

(b) Each Investor and Key Holder consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "**DGCL**"), as amended or superseded from time to time, or under this Agreement by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the email address set forth below such Investor's or Key Holder's name on the Schedules hereto, as updated from time to time by notice to the Company or as on the books of the Company. Each Investor and Key Holder agrees to promptly notify the Company of any change in its email address, and the failure to do so shall not affect the foregoing.

6.6 Entire Agreement. This Agreement (including the Exhibits and Schedules hereto) constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled.

6.7 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.8 Amendment; Waiver and Termination. This Agreement may be amended, modified or terminated (other than pursuant to Section 6.1 above) and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only by a written instrument executed by (a) the Company, (b) the Key Holders holding at least a majority of the shares of Transfer Stock then held by all of the Key Holders who are then employed by Company and (c) the holders of at least a majority of the shares of Common Stock issued or issuable upon conversion of the then outstanding shares of Preferred Stock held by the Investors (voting as a single class and on an as-converted to Common Stock basis). Any amendment, modification, termination or waiver so effected shall be binding upon the Company, the Investors, the Key Holders and all of their respective successors and permitted assigns whether or not such party, assignee or other shareholder entered into or approved such amendment, modification, termination or waiver. Notwithstanding the foregoing, (i) this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with

respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, modification, termination or waiver applies to all Investors and Key Holders, respectively, in the same fashion, (ii) the consent of the Key Holders shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination or waiver does not apply to the Key Holders, (iii) Schedule A hereto may be amended by the Company from time to time in accordance with the Purchase Agreement to add information regarding Additional Purchasers (as defined in the Purchase Agreement) without the consent of the other parties hereto, (iv) Section 3.3 of this Agreement may not be amended, modified, or terminated, and the observance of any term of Section 3.3 may not be waived, without the written consent of PIC, Anterra, F-Prime, Novartis, DuPont, PFM, Farallon, Ridgeback, or AbbVie to the extent such amendment, modification, termination, or waiver affects such party, (v) Section 2.2(d)(ii) of this Agreement may not be amended, modified, or terminated, and the observance of any term of Section 2.2(d)(ii) may not be waived, without the written consent of (A) the holders of a majority of the outstanding Series B Preferred Stock, voting or consenting together as a single class, and (B) the holders of at least two-thirds (2/3rds) of the outstanding Series C Preferred Stock, voting or consenting together as a single class, and (vi) Schedule B hereto may be amended by the Company from time to time in accordance with Section 6.17 below to add information regarding additional Key Holders without the consent of the other parties hereto. The Company shall give prompt written notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination or waiver. No waivers of or exceptions to any term, condition or provision of this Agreement, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

6.9 Assignment of Rights.

(a) The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

(b) Any successor or permitted assignee of any Key Holder, including any Prospective Transferee who purchases shares of Transfer Stock in accordance with the terms hereof, shall deliver to the Company and the Investors, as a condition to any transfer or assignment, a counterpart signature page hereto pursuant to which such successor or permitted assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the predecessor or assignor of such successor or permitted assignee.

(c) The rights of the Investors hereunder are not assignable without the Company's written consent (which shall not be unreasonably withheld, delayed or conditioned), except (i) by an Investor to any Affiliate or (ii) to an assignee or transferee who acquires at least 100,000 shares of Capital Stock (as adjusted for any stock combination, stock split, stock dividend, recapitalization or other similar transaction), it being acknowledged and agreed that any such assignment, including an assignment contemplated by the preceding clauses (i) or (ii) shall be subject to and conditioned upon any such assignee's delivery to the Company and the other Investors of a counterpart signature page hereto pursuant to which such assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the assignor of such assignee.

(d) Except in connection with an assignment by the Company by operation of law to an acquirer or successor of the Company, the rights and obligations of the Company hereunder may not be assigned under any circumstances.

6.10 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

6.11 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of Series C Preferred Stock pursuant to the Purchase Agreement after the date hereof, any purchaser of such shares of Series C Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and thereafter shall be deemed an "Investor" for all purposes hereunder.

6.12 Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law.

6.13 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.14 Counterparts; Electronic Transmission. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.15 Aggregation of Stock. All shares of Capital Stock held or acquired by Affiliated entities or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.16 Specific Performance. In addition to any and all other remedies that may be available at law in the event of any breach of this Agreement, each Investor shall be entitled to specific performance of the agreements and obligations of the Company and the Key Holders hereunder and to such other injunction or other equitable relief as may be granted by a court of competent jurisdiction.

6.17 Additional Key Holders. In the event that after the date of this Agreement, the Company issues shares of Common Stock to any employee or consultant, which shares would collectively constitute with respect to such employee or consultant (taking into account all shares of Common stock, options and other purchase rights held by such employee or consultant) one percent (1%) or more of the Company's then outstanding Common Stock (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised or converted), the Company shall, as a condition to such issuance, cause such employee or consultant to execute a counterpart signature page hereto as a Key Holder, and such person shall thereby be bound by, and subject to, all the terms and provisions of this Agreement applicable to a Key Holder.

6.18 Consent of Spouse. If any Key Holder is married and domiciled in a community property state on the date of this Agreement, such Key Holder's spouse shall execute and deliver to the Company a Consent of Spouse in the form of Exhibit A hereto ("**Consent of Spouse**"), effective on the date hereof. Notwithstanding the execution and delivery thereof, such consent shall not be deemed to confer or convey to the spouse any rights in such Key Holder's shares of Transfer Stock that do not otherwise exist by operation of law or the agreement of the parties. If any Key Holder should marry or remarry and be domiciled in a community property state subsequent to the date of this Agreement, such Key Holder shall within thirty (30) days thereafter obtain his/her new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement by causing such spouse to execute and deliver a Consent of Spouse acknowledging the restrictions and obligations contained in this Agreement and agreeing and consenting to the same.

6.19 Effect on Prior Agreement. Upon the execution and delivery of this Agreement by the Company, the Key Holders holding a majority in interest of the Transfer Stock and the holders of at least a majority in interest of the Capital Stock held by those Investors who are party to the Prior Agreement (measured before giving effect to any purchase of shares of Series C Preferred Stock by such Investors), the Prior Agreement automatically shall terminate and be of no further force and effect and shall be amended and restated in its entirety as set forth in this Agreement.

6.20 Tekla Funds. A copy of the Declaration of Trust, as amended and restated, for each of Tekla Healthcare Investors and Tekla Life Sciences Investors (together, the "**Tekla Funds**") is on file with the Secretary of State of The Commonwealth of Massachusetts, and notice is hereby given that this Agreement is executed on behalf of the Tekla Funds by an officer or trustee of the Tekla Funds in his or her capacity as an officer or trustee of the Tekla Funds, and not individually and that the obligations of or arising out of this Agreement are not binding upon any of the trustees, officers or shareholders individually but are binding only upon the assets and property of each of the respective Tekla Funds.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

COMPANY:

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

PFM Healthcare Master Fund, L.P.
By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

Partner Investments, L.P.
By: PFM Health Sciences, LP, its investment advisor

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

PFM Healthcare Growth Equity Holdings I, LLC
By: PFM Health Sciences GP, LLC, its member manager

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: CFO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

ZONE III HEALTHCARE HOLDINGS, LLC

By: Farallon Capital Management, L.L.C., its Manager

By: /s/ Philip Dreyfuss
Name: Philip Dreyfuss
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

RIDGEBACK CAPITAL INVESTMENTS LP

by RIDGEBACK CAPITAL MANAGEMENT LLC its Fund Manager:

By: /s/ Christian Sheldon
Name: Christian Sheldon
Title: COO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

AbbVie Inc.

By: /s/ Adam Houghton
Name: Adam Houghton
Title: VP & Head, AbbVie Ventures

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

MAVERICK VENTURES INVESTMENT FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

MAVERICK ADVISORS FUND, L.P.

By: Maverick Capital Ventures, LLC, its General Partner
By: Maverick Capital Advisors, L.P., its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Adage Capital Partners, LP
By: Adage Capital Partners, GP, LLC, it's General Partner
By: Age Capital Advisors, LLC it's Managing Member

By: /s/ Dan Lehan
Name: Dan Lehan
Title: Chief Operating Officer

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Janus Henderson Capital Funds plc on behalf of its series Janus Henderson Global Life Sciences Fund

By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

Janus Henderson Biotech Innovation Master Fund Limited
By: Janus Capital Management LLC, its investment advisor

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Monashee Solitario Fund LP

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

DS Liquid Div RVA MON LLC

By: /s/ Jeff Muller
Name: Jeff Muller
Title: COO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Point72 Biotech Private Investments, LLC

By: /s/ Vincent Tortorella
Name: Vincent Tortorella
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

AngelList-Cces-Fund, a Series of AngelList-JR Funds, LLC

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

AngelList-Cces-PR-Fund, a series of AngelList-JR-Funds, LLC

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Central Valley Administrators, Inc.

By: /s/ Richard Merkin
Name: Richard Merkin
Title: President

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

CAROLEM CAPITAL LLC

By: /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

NRG CAPITAL HOLDINGS LLC

By: /s/ Michael Karlin
Name: Michael Karlin
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

LLS TAP, LLC

By: /s/ Louis DeGennaro
Name: Louis DeGennaro
Title: President & CEO

By: /s/ Gordon Miller
Name: Gordon Miller
Title: EVP & CFO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Tekla Healthcare Investors*

By: /s/ Daniel R. Omstead
Name: Daniel R. Omstead
Title: President

* The name Tekla Healthcare Investors is the designation of the Trustees for the time being under an Amended & Restated Declaration of Trust dated April 21, 1987, as amended, and all persons dealing with Tekla Healthcare Investors must look solely to the trust property for the enforcement of any claim against Tekla Healthcare Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Healthcare Investors.

Tekla Life Sciences Investors*

By: /s/ Daniel R. Omstead
Name: Daniel R. Omstead
Title: President

* The name Tekla Life Sciences Investors is the designation of the Trustees for the time being under a Declaration of Trust dated February 20, 1992, as amended, and all persons dealing with Tekla Life Sciences Investors must look solely to the trust property for the enforcement of any claim against Tekla Life Sciences Investors, as neither the Trustees, officers nor shareholders assume any personal liability for the obligations entered into on behalf of Tekla Life Sciences Investors.

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Jenny Rooke

By: /s/ Jenny Rooke

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

PONTIFAX GLOBAL FOOD AND AGRICULTURE TECHNOLOGY FUND, L.P.

By: /s/ Benjamin Belldegrun
Name: Benjamin Belldegrun
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

WS Investment Company, LLC (21A)

By: /s/ James Terranova
Name:
Title:

WS Investment Company, LLC (2014A)

By: /s/ James Terranova
Name:
Title:

WS Investment Company, LLC (2015A)

By: /s/ James Terranova
Name:
Title:

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

James and Jennifer Doudna Cate Living Trust DTD 01/02/2014

By: /s/ Jennifer Doudna
Name: Jennifer Doudna
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Mintz Levin Special Investments Fund LLC

By: /s/ Megan N. Gates
Name: Megan N. Gates
Title: Member

Mintz Levin Special Investments Fund LLC — Series FY21

By: /s/ Megan N. Gates
Name: Megan N. Gates
Title: Member

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

James Berger & Marian Feldman

By: /s/ James Berger

By: /s/ Marian Feldman

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

E. I. du Pont de Nemours and Company

By: /s/ George J. Duko
Name: George J. Duko
Title: Vice President, Mergers & Acquisitions

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

HEALTHCARE INNOVATION INVESTMENT FUND LLC

By: /s/ Joseph R. Gentile
Name: Joseph R. Gentile
Title: Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Pacific Continental Investment Company, LLC

By: /s/ Marc Stridiron
Name: Marc Stridiron
Title: Portfolio Manager

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Pig Improvement Company UK Limited

By: /s/ Stephen Wilson
Name: Stephen Wilson
Title: CEO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

LifeSci Venture Partners II, LP

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

LifeSci Venture Master SPV, LLC

By: /s/ Paul Yook
Name: Paul Yook
Title: Managing Member

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Anterra F&A Ventures I Coöperatief U.A.

By: /s/ Adam Anders
Name: Adam Anders
Title: Director

By: /s/ Maarten Goossens
Name: Maarten Goossens
Title: Director

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

F-PRIME CAPITAL PARTNERS HEALTHCARE
FUND IV LP

By: F-Prime Capital Partners Healthcare Advisors Fund IV LP, its General Partner
By: Impresa Holdings LLC, its General Partner
By: Impresa Management LLC, its Managing Member

By: /s/ Mary Bevelock Pendergast
Name: Mary Bevelock Pendergast
Title: Vice President

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Avego Bioscience Capital, L.P.
By: Avego Bioscience Capital GP, LLC, its general partner

By: /s/ James Flexner
Name: James Flexner
Title: Managing Partner

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Avidity Master Fund LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

Avidity Capital Fund II LP

By: /s/ Michael Gregory
Name: Michael Gregory
Title: Director

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Zachary A. Robbins Trust dtd December 31, 1987

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Robbins Family Trust of 1986

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Lucas Hamilton Robbins Trust dtd November 17, 1991

By: /s/ Rich Robbins
Name: Rich Robbins
Title: Trustee

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Novartis Institutes for BioMedical Research, Inc.

By: /s/ Scott A. Brown
Name: Scott A Brown
Title: VP CAO

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

INVUS PUBLIC EQUITIES, L.P.

By: /s/ Raymond Debbane
Name: Raymond Debbane
Title: President of its General Partner

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

CA Fund I, a series of 5 Prime Ventures, LP
By: Fund GP, LLC its General Partner
By: Belltower Fund Group, Ltd. Manager of the General Partner

By: /s/ Brett Sagan
Name: Brett Sagan
Title: Authorized Person

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

INVESTOR:

Rodolphe and Lisa Barrangou

By: /s/ Rodolphe Barrangou

By: /s/ Lisa Barrangou

IN WITNESS WHEREOF, the parties have executed this **Second Amended and Restated Right of First Refusal and Co-Sale Agreement** as of the date first written above.

KEY HOLDER

/s/ James Berger
James Berger

/s/ Jennifer Doudna
Jennifer Doudna

/s/ Rachel E. Haurwitz
Rachel E. Haurwitz

/s/ Martin Jinek
Martin Jinek

Andrew May

SCHEDULE A
INVESTORS

SCHEDULE B

KEY HOLDERS

EXHIBIT A
CONSENT OF SPOUSE

I, [ ], spouse of [ ], acknowledge that I have read the Second Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of , 2021, to which this Consent is attached as Exhibit A (the "**Agreement**"), and that I know the contents of the Agreement. I am aware that the Agreement contains provisions regarding certain rights to certain other holders of Capital Stock of the Company upon a Proposed Key Holder Transfer of shares of Transfer Stock of the Company which my spouse may own including any interest I might have therein.

I hereby agree that my interest, if any, in any shares of Transfer Stock of the Company subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in such shares of Transfer Stock of the Company shall be similarly bound by the Agreement.

I am aware that the legal, financial and related matters contained in the Agreement are complex and that I am free to seek independent professional guidance or counsel with respect to this Consent. I have either sought such guidance or counsel or determined after reviewing the Agreement carefully that I will waive such right.

Dated as of the [ ] day of [,].

_____
Signature

_____
Print Name

Exhibit 10.63

March 2, 2021

PFM Health Sciences, LP
4 Embarcadero Center, Suite 3500
San Francisco, CA 94111
Attn: Yuan DuBord

Re: Participation Rights

This letter agreement (this "**Agreement**") memorializes the agreement and understanding between PFM Health Sciences, LP ("**Investor**"), on the one hand, and Caribou Biosciences, Inc., a Delaware corporation (the "**Company**"), on the other hand, regarding the Company's grant to Investor of the right to participate in the Company's future initial public offering of its equity securities on the terms, and subject to the conditions, set forth below.

The Company is entering into this Agreement as a material inducement to cause Investor to enter into that certain Series C Preferred Stock Purchase Agreement, dated as of the date hereof, by and among the Company, Investor, and the other purchasers named therein (the "**Purchase Agreement**"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Purchase Agreement and, to the extent not defined therein, such terms shall have the meanings ascribed to them in that certain Second Amended and Restated Investors' Rights Agreement, dated as of the date hereof, by and among the Company, Investor, and the parties named therein (the "**IRA**").

In consideration of the foregoing and the mutual promises and covenants hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, by execution of this Agreement, the parties hereto hereby agree as follows:

1. **Public Offering Participation Right.** In connection with the Company's sale of shares of its voting common stock ("**Common Stock**") to the public in the first to occur of (a) the Company's first firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act (an "**IPO**") where a majority of the shares sold in such offering are newly issued shares of the Company or (b) the Company's first "direct public offering" pursuant to an effective registration statement under the Securities Act (a "**DPO**") where (i) a majority of the shares sold in such offering are newly issued shares of the Company, (ii) the price per share to the public is at least $21.572 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), and (iii) the gross proceeds to the Company are at least $50,000,000 (a "**Qualified DPO**"), the Company shall, within a reasonable period of time preceding the consummation of such IPO or Qualified DPO and in compliance with and subject to all applicable laws and regulations, use commercially reasonable efforts to provide Investor with the opportunity to purchase shares of Common Stock to be sold by the Company (for the avoidance of doubt, in such Qualified DPO, Investor's participation right shall not apply to the sale by any securityholders of their shares), in such IPO or Qualified DPO (including, in the case of an IPO, any over-allotment option by the underwriters to such IPO, if any (the "**Overallotment Option**")) at the same price per share at which the Common Stock offered in such IPO or Qualified DPO are being offered to the public (the "**Public Price**") (such right, the "**Public Offering Participation Right**"). If Investor exercises its Public Offering Participation Right, Investor shall have the right to purchase up to a number of shares of Common Stock to be sold in such IPO (excluding the Overallotment Option, if any) or Qualified DPO equal to ten percent (10%) (the "**Participation Right Percentage**") of the aggregate number of shares of Common Stock to be sold by the Company in such IPO (excluding, the Overallotment Option, if any) or Qualified DPO. In the case of an IPO, in the event that any additional shares of Common Stock are sold by the Company in any exercise by the IPO underwriters of the Overallotment Option, then if Investor has exercised its Public Offering Participation Right in connection with the IPO, Investor shall have the right to purchase up to a number of shares of Common Stock to be sold pursuant to the Overallotment Option equal to the Participation Right Percentage of the aggregate number of shares of Common Stock to be sold by the Company pursuant to the Overallotment Option. Notwithstanding the preceding two sentences, in the event that in exercising the Public Offering Participation Right the number of shares of Common Stock held by Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by Investor) after such purchase(s) pursuant to the Public

Offering Participation Right (and after giving effect to the consummation of the IPO or Qualified DPO) would exceed ten percent (10%) of the total Common Stock then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities) after giving effect to the consummation of the IPO, the Company and Investor shall comply with Section 5 below. Investor may assign its Public Offering Participation Right to any of its Affiliates; provided, however, that the number of shares of Common Stock that may be purchased by Investor and its Affiliates in the aggregate pursuant to the Public Offering Participation Right and any assignment(s) thereof shall not exceed the number of shares of Common Stock that Investor was originally entitled to purchase pursuant to the Public Offering Participation Right. For the avoidance of doubt, nothing in this Section 1 is intended to limit the number of shares that Investor or its Affiliates may acquire in the IPO outside of its Public Offering Participation Right. Unless the context otherwise requires or is expressly provided otherwise, references in this Agreement to the IPO shall include any exercised Overallotment Option. For the avoidance of doubt, the rights described in this Section 1 and Section 2 below shall apply only to the first to occur of an IPO or a Qualified DPO, in each case where a majority of the shares sold in such offering are newly issued shares of the Company, and shall not apply to any subsequent offering of the Company's securities. Notwithstanding anything to the contrary herein, if the Company proposes to consummate a DPO that is not a Qualified DPO, the Company shall give Investor reasonable advance notice of such DPO and the proposed terms, and Investor shall have the right (in its sole discretion) to elect to deem such DPO to be a Qualified DPO for all purposes under this Agreement.

2. **Private Sale Participation Right.**

(a) Notwithstanding Section 1 above, in the event that either (i) the Company is advised by its outside legal counsel, the Securities and Exchange Commission (the "**SEC**"), the Financial Industry Regulatory Authority ("**FINRA**"), or any stock exchange on which the Common Stock is to be traded (the "**Exchange**") that the offering or sale of the Company's securities to Investor as described above in Section 1 would violate any federal or state securities laws or the rules or regulations of the SEC, FINRA, or the Exchange, (ii) in the case of an IPO, the managing underwriter(s) reasonably determines that marketing factors require a limitation on the number of shares of Common Stock to be underwritten in connection with the IPO and request(s) that Investor's Public Offering Participation Right be subject to carve-backs, restrictions, or other limitations, or (iii) in the case of a Qualified DPO, the Company reasonably determines in good faith that such marketing factors require a limitation on the number of shares of Common Stock to be sold by the Company in connection with the Qualified DPO and request(s) that Investor's Public Offering Participation Right be subject to carve-backs, restrictions, or other limitations (each of the events described in the foregoing clauses (i), (ii) or (iii), a "**Cutback**"), then, in each case, the Company shall offer to Investor the right to purchase in a separate private placement (the "**Private Placement**") (which shall be conducted concurrently with the IPO or Qualified DPO, as applicable, and the closing of which shall be contingent on the closing of such IPO or Qualified DPO), at the Public Price, up to that number of shares of Common Stock equal to the difference between the number of shares of Common Stock that Investor would have been able to purchase pursuant to the Public Offering Participation Right in Section 1 above but for the applicable Cutback, and the number of shares of Common Stock that Investor was actually permitted to purchase in such IPO or Qualified DPO pursuant to Section 1, if any (the "**Private Sale Participation Right**"). Notwithstanding anything to the contrary set forth above, (A) no such Cutback under the foregoing clause (ii) or (iii) shall be imposed on Investor unless the number of shares of Common Stock that would otherwise be purchased by any other individual or entity to which the Company has granted, pursuant to a binding written agreement, rights similar to the Public Offering Participation Right (the "**Other Participating Investors**"), excluding the other Lead Investors, has been cutback to zero, and (B) if any Cutback under the foregoing clause (ii) or (iii) shall be imposed on Investor, such Cutback shall apply equally to the other Lead Investors with respect to the number of shares of Common Stock that Investor and the other Lead Investors are prohibited from purchasing upon exercise of their respective rights. Investor may assign its Private Sale Participation Right to any of its Affiliates; provided, however, that the number of shares of Common Stock that may be purchased by Investor and its Affiliates in the aggregate pursuant to the Private Sale Participation Right and any assignment(s) thereof shall not exceed the number of shares of Common Stock that Investor was originally entitled to purchase pursuant to the Private Sale Participation Right. Any shares of Common Stock that Investor purchases in a Private Placement shall be exempt from the registration requirements of the Securities Act.

(b) Notwithstanding the foregoing, Investor agrees that (i) in no event shall the Private Sale Participation Right be exercised in such a manner that, in the reasonable determination of the managing underwriter(s), would materially and adversely affect the IPO or, in the case of a Qualified DPO, in the reasonable

good faith determination of the Company, would materially and adversely affect the Qualified DPO, and (ii) the number of shares Investor is entitled to purchase may be reduced or modified only to the extent reasonably requested by the Company's underwriter(s) (or by the Company in the case of the Qualified DPO) as to not cause such material and adverse effect on the IPO or Qualified DPO, as the case may be; provided, however, that (A) the number of shares of Common Stock that Investor is entitled to purchase may not be reduced or modified unless the number of shares of Common Stock that would otherwise be purchased in the Private Placement by any Other Participating Investors, excluding the other Lead Investors, has been reduced to zero, and (B) if any such reduction or modification shall be imposed on Investor, such reduction or modification shall apply equally to the other Lead Investors with respect to the number of shares of Common Stock that Investor and the other Lead Investors are prohibited from purchasing upon exercise of their respective rights.

(c) If Investor exercises its Private Sale Participation Right, the Company and Investor shall execute and deliver such documents that are (i) customary for a transaction structured as a concurrent private placement with a public offering, including without limitation customary resale registration rights, and (ii) reasonably satisfactory to the Company, Investor, and the managing underwriter(s), if applicable.

3. **SPAC Transaction Participation Right**. If the Company proposes to enter into a SPAC Transaction (as defined in the Certificate of Incorporation), and the SPAC (as defined in the Certificate of Incorporation) (or a parent or subsidiary of the SPAC) proposes to offer or sell securities in a private placement transaction that is contemporaneous with, or otherwise connected to or conditioned on, such SPAC Transaction, the Company will use its commercially reasonable efforts, in compliance with and subject to all applicable laws and regulations, to ensure that Investor (or one or more of its affiliates designated by Investor) is given the opportunity to purchase or otherwise acquire up to 10% of the total number of securities to be offered or sold in such private placement transaction, at the same price and on the same terms offered to the other investors in such private placement transaction (and for such terms to include, without limitation, customary resale registration rights). The Company acknowledges and agrees that, for purposes of this Section 3, commercially reasonable efforts shall include requesting that the sponsor or management of the SPAC (or of such parent or subsidiary of the SPAC) acknowledge and consider providing the benefit of such participation rights to Investor (or one or more of its affiliates designated by Investor) in accordance with the immediately preceding sentence.

4. **Private Placement Participation Right**. If the Company proposes to offer or sell securities in a private placement transaction that is substantially contemporaneous with or conditioned on an IPO (except pursuant to a Private Placement), a DPO (including a Qualified DPO, except pursuant to a Private Placement) or a SPAC Transaction, the Company shall, in compliance with and subject to all applicable laws and regulations, offer Investor (or one or more of its affiliates designated by Investor) a right (but not an obligation) to purchase or otherwise acquire up to 10% of the total number of securities to be offered or sold in such private placement transaction, at the same price and on the same terms offered to the other investors in such private placement transaction (and such terms shall include, without limitation, customary resale registration rights); provided, however, that while the parties anticipate that such private placement transaction would not be subject to the right of first offer contained in Section 4.1 of the IRA, in the event such right of first offer applied to such private placement transaction, then any amounts purchased by Investor pursuant to such right of first offer contained in the IRA shall count toward (and thereby reduce) the amount of securities that Investor shall have the right to purchase in such private placement transaction pursuant to this Section 4.

5. **Beneficial Ownership Limitation**. If, as a result of Investor's exercise of its participation rights set forth herein in connection with an IPO, a DPO (including a Qualified DPO) or a SPAC Transaction, Investor would beneficially own (as calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")) more than 9.99% of the outstanding shares of a class of voting equity securities of the Company, the SPAC or a parent or subsidiary of the SPAC, as applicable, that is registered as a class under Section 12 of the Exchange Act (the "**Public Shares**") as of immediately following the IPO, DPO or SPAC Transaction, as applicable, the Company and Investor shall work together in good faith to use commercially reasonable efforts, in compliance with and subject to all applicable laws and regulations, to restructure Investor's holdings such that Investor will not beneficially own more than 9.99% of the outstanding Public Shares as of immediately following the IPO, DPO or SPAC Transaction, as applicable, with the remainder of Investor's shares to be converted into non-voting shares or warrants convertible or exercisable at Investor's option into Public Shares only if such conversion or exercise would not result in Investor beneficially owning more than 9.99% of the then-outstanding Public Shares.

6. **Representations and Warranties.** Each party represents and warrants to the other party that (a) this Agreement has been duly authorized and executed by such party and is a valid and binding obligation of such party, enforceable against such party in accordance with its terms, and (b) the execution of this Agreement is not inconsistent with any of such party's organizational documents, or any law applicable to such party, and does not conflict with or contravene any provision of, or constitute a default under, any contract or other instrument to which such party is a party or by which it is bound.

7. **Severability.** The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

8. **Amendments; Termination**. This Agreement may not be modified, amended, or terminated, in whole or in part, except by an agreement in writing signed by the parties hereto. The Company acknowledges and agrees that this Agreement shall not be amended, waived, canceled, terminated or superseded by any amendment to, or any restatement of, the Purchase Agreement or the IRA, or by any other agreement entered into on or after the date hereof (whether or not it includes an integration clause), except with the prior written consent of Investor which expressly states that this Agreement is so amended, terminated or superseded. Whether or not Investor exercises any of its participation rights under Section 1, 2, 3, or 4 of this Agreement, this Agreement shall automatically terminate and be of no further force or effect upon the first to occur of (i) consummation of an IPO (and, if applicable, the Private Placement), (ii) consummation of a Qualified DPO (and, if applicable, the Private Placement), (iii) consummation of a SPAC Transaction, (iv) consummation of a Deemed Liquidation Event (as defined in the Certificate of Incorporation), or (v) such time as Investor and its Affiliates no longer hold any of securities of the Company; provided that, in the case of the foregoing clauses (i) through (iv), such termination shall not be effective until the Company has fulfilled all of its obligations under this Agreement with respect to such IPO (and, if applicable, the Private Placement), Qualified DPO, SPAC Transaction, or Deemed Liquidation Event, as applicable.

9. **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law), or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

10. **Assignment; Successors and Assigns**. This Agreement and all rights and obligations of Investor hereunder are personal to Investor and, except for transfers or assignments to Affiliates and as otherwise expressly provided for herein, may not be transferred or assigned by Investor at any time without the Company's prior written consent. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and permitted assigns.

11. **Governing Law**. The governing law and dispute resolution provisions set forth in Section 6.3 and 6.12 of the Purchase Agreement are incorporated by reference herein, *mutatis mutandis*.

(*The remainder of this page left intentionally blank.*)

Please confirm your agreement to the terms of this Agreement by counter-signature where indicated below.

Sincerely,

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

Accepted by:

PFM HEALTH SCIENCES, LP

By: /s/ Yuan DuBord
Name: Yuan DuBord
Title: Chief Financial Officer

Exhibit 10.64

March 2, 2021

Ridgeback Capital Investments LP
30 W Star Island Dr.
Miami Beach, FL 33139
Attn: Wayne Holman, M.D.

Re: Participation Rights

This letter agreement (this "**Agreement**") memorializes the agreement and understanding between Ridgeback Capital Investments LP ("**Investor**"), on the one hand, and Caribou Biosciences, Inc., a Delaware corporation (the "**Company**"), on the other hand, regarding the Company's grant to Investor of the right to participate in the Company's future initial public offering of its equity securities on the terms, and subject to the conditions, set forth below.

The Company is entering into this Agreement as a material inducement to cause Investor to enter into that certain Series C Preferred Stock Purchase Agreement, dated as of the date hereof, by and among the Company, Investor, and the other purchasers named therein (the "**Purchase Agreement**"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Purchase Agreement and, to the extent not defined therein, such terms shall have the meanings ascribed to them in that certain Second Amended and Restated Investors' Rights Agreement, dated as of the date hereof, by and among the Company, Investor, and the parties named therein (the "**IRA**").

In consideration of the foregoing and the mutual promises and covenants hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, by execution of this Agreement, the parties hereto hereby agree as follows:

1. **Public Offering Participation Right.** In connection with the Company's sale of shares of its voting common stock ("**Common Stock**") to the public in the first to occur of (a) the Company's first firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act (an "**IPO**") where a majority of the shares sold in such offering are newly issued shares of the Company or (b) the Company's first "direct public offering" pursuant to an effective registration statement under the Securities Act (a "**DPO**") where (i) a majority of the shares sold in such offering are newly issued shares of the Company, (ii) the price per share to the public is at least $21.572 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), and (iii) the gross proceeds to the Company are at least $50,000,000 (a "**Qualified DPO**"), the Company shall, within a reasonable period of time preceding the consummation of such IPO or Qualified DPO and in compliance with and subject to all applicable laws and regulations, use commercially reasonable efforts to provide Investor with the opportunity to purchase shares of Common Stock to be sold by the Company (for the avoidance of doubt, in such Qualified DPO, Investor's participation right shall not apply to the sale by any securityholders of their shares), in such IPO or Qualified DPO (including, in the case of an IPO, any over-allotment option by the underwriters to such IPO, if any (the "**Overallotment Option**")) at the same price per share at which the Common Stock offered in such IPO or Qualified DPO are being offered to the public (the "**Public Price**") (such right, the "**Public Offering Participation Right**"). If Investor exercises its Public Offering Participation Right, Investor shall have the right to purchase up to a number of shares of Common Stock to be sold in such IPO (excluding the Overallotment Option, if any) or Qualified DPO equal to ten percent (10%) (the "**Participation Right Percentage**") of the aggregate number of shares of Common Stock to be sold by the Company in such IPO (excluding, the Overallotment Option, if any) or Qualified DPO. In the case of an IPO, in the event that any additional shares of Common Stock are sold by the Company in any exercise by the IPO underwriters of the Overallotment Option, then if Investor has exercised its Public Offering Participation Right in connection with the IPO, Investor shall have the right to purchase up to a number of shares of Common Stock to be sold pursuant to the Overallotment Option equal to the Participation Right Percentage of the aggregate number of shares of Common Stock to be sold by the Company pursuant to the Overallotment Option. Notwithstanding the preceding two sentences, in the event that in exercising the Public Offering Participation Right the number of shares of Common Stock held by Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by Investor) after such purchase(s) pursuant to the Public

Offering Participation Right (and after giving effect to the consummation of the IPO or Qualified DPO) would exceed ten percent (10%) of the total Common Stock then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities) after giving effect to the consummation of the IPO, the Company and Investor shall comply with Section 5 below. Investor may assign its Public Offering Participation Right to any of its Affiliates; provided, however, that the number of shares of Common Stock that may be purchased by Investor and its Affiliates in the aggregate pursuant to the Public Offering Participation Right and any assignment(s) thereof shall not exceed the number of shares of Common Stock that Investor was originally entitled to purchase pursuant to the Public Offering Participation Right. For the avoidance of doubt, nothing in this Section 1 is intended to limit the number of shares that Investor or its Affiliates may acquire in the IPO outside of its Public Offering Participation Right. Unless the context otherwise requires or is expressly provided otherwise, references in this Agreement to the IPO shall include any exercised Overallotment Option. For the avoidance of doubt, the rights described in this Section 1 and Section 2 below shall apply only to the first to occur of an IPO or a Qualified DPO, in each case where a majority of the shares sold in such offering are newly issued shares of the Company, and shall not apply to any subsequent offering of the Company's securities. Notwithstanding anything to the contrary herein, if the Company proposes to consummate a DPO that is not a Qualified DPO, the Company shall give Investor reasonable advance notice of such DPO and the proposed terms, and Investor shall have the right (in its sole discretion) to elect to deem such DPO to be a Qualified DPO for all purposes under this Agreement.

2. **Private Sale Participation Right.**

(a) Notwithstanding Section 1 above, in the event that either (i) the Company is advised by its outside legal counsel, the Securities and Exchange Commission (the "**SEC**"), the Financial Industry Regulatory Authority ("**FINRA**"), or any stock exchange on which the Common Stock is to be traded (the "**Exchange**") that the offering or sale of the Company's securities to Investor as described above in Section 1 would violate any federal or state securities laws or the rules or regulations of the SEC, FINRA, or the Exchange, (ii) in the case of an IPO, the managing underwriter(s) reasonably determines that marketing factors require a limitation on the number of shares of Common Stock to be underwritten in connection with the IPO and request(s) that Investor's Public Offering Participation Right be subject to carve-backs, restrictions, or other limitations, or (iii) in the case of a Qualified DPO, the Company reasonably determines in good faith that such marketing factors require a limitation on the number of shares of Common Stock to be sold by the Company in connection with the Qualified DPO and request(s) that Investor's Public Offering Participation Right be subject to carve-backs, restrictions, or other limitations (each of the events described in the foregoing clauses (i), (ii) or (iii), a "**Cutback**"), then, in each case, the Company shall offer to Investor the right to purchase in a separate private placement (the "**Private Placement**") (which shall be conducted concurrently with the IPO or Qualified DPO, as applicable, and the closing of which shall be contingent on the closing of such IPO or Qualified DPO), at the Public Price, up to that number of shares of Common Stock equal to the difference between the number of shares of Common Stock that Investor would have been able to purchase pursuant to the Public Offering Participation Right in Section 1 above but for the applicable Cutback, and the number of shares of Common Stock that Investor was actually permitted to purchase in such IPO or Qualified DPO pursuant to Section 1, if any (the "**Private Sale Participation Right**"). Notwithstanding anything to the contrary set forth above, (A) no such Cutback under the foregoing clause (ii) or (iii) shall be imposed on Investor unless the number of shares of Common Stock that would otherwise be purchased by any other individual or entity to which the Company has granted, pursuant to a binding written agreement, rights similar to the Public Offering Participation Right (the "**Other Participating Investors**"), excluding the other Lead Investors, has been cutback to zero, and (B) if any Cutback under the foregoing clause (ii) or (iii) shall be imposed on Investor, such Cutback shall apply equally to the other Lead Investors with respect to the number of shares of Common Stock that Investor and the other Lead Investors are prohibited from purchasing upon exercise of their respective rights. Investor may assign its Private Sale Participation Right to any of its Affiliates; provided, however, that the number of shares of Common Stock that may be purchased by Investor and its Affiliates in the aggregate pursuant to the Private Sale Participation Right and any assignment(s) thereof shall not exceed the number of shares of Common Stock that Investor was originally entitled to purchase pursuant to the Private Sale Participation Right. Any shares of Common Stock that Investor purchases in a Private Placement shall be exempt from the registration requirements of the Securities Act.

(b) Notwithstanding the foregoing, Investor agrees that (i) in no event shall the Private Sale Participation Right be exercised in such a manner that, in the reasonable determination of the managing underwriter(s), would materially and adversely affect the IPO or, in the case of a Qualified DPO, in the reasonable

good faith determination of the Company, would materially and adversely affect the Qualified DPO, and (ii) the number of shares Investor is entitled to purchase may be reduced or modified only to the extent reasonably requested by the Company's underwriter(s) (or by the Company in the case of the Qualified DPO) as to not cause such material and adverse effect on the IPO or Qualified DPO, as the case may be; provided, however, that (A) the number of shares of Common Stock that Investor is entitled to purchase may not be reduced or modified unless the number of shares of Common Stock that would otherwise be purchased in the Private Placement by any Other Participating Investors, excluding the other Lead Investors, has been reduced to zero, and (B) if any such reduction or modification shall be imposed on Investor, such reduction or modification shall apply equally to the other Lead Investors with respect to the number of shares of Common Stock that Investor and the other Lead Investors are prohibited from purchasing upon exercise of their respective rights.

(c) If Investor exercises its Private Sale Participation Right, the Company and Investor shall execute and deliver such documents that are (i) customary for a transaction structured as a concurrent private placement with a public offering, including without limitation customary resale registration rights, and (ii) reasonably satisfactory to the Company, Investor, and the managing underwriter(s), if applicable.

3. **SPAC Transaction Participation Right**. If the Company proposes to enter into a SPAC Transaction (as defined in the Certificate of Incorporation), and the SPAC (as defined in the Certificate of Incorporation) (or a parent or subsidiary of the SPAC) proposes to offer or sell securities in a private placement transaction that is contemporaneous with, or otherwise connected to or conditioned on, such SPAC Transaction, the Company will use its commercially reasonable efforts, in compliance with and subject to all applicable laws and regulations, to ensure that Investor (or one or more of its affiliates designated by Investor) is given the opportunity to purchase or otherwise acquire up to 10% of the total number of securities to be offered or sold in such private placement transaction, at the same price and on the same terms offered to the other investors in such private placement transaction (and for such terms to include, without limitation, customary resale registration rights). The Company acknowledges and agrees that, for purposes of this Section 3, commercially reasonable efforts shall include requesting that the sponsor or management of the SPAC (or of such parent or subsidiary of the SPAC) acknowledge and consider providing the benefit of such participation rights to Investor (or one or more of its affiliates designated by Investor) in accordance with the immediately preceding sentence.

4. **Private Placement Participation Right**. If the Company proposes to offer or sell securities in a private placement transaction that is substantially contemporaneous with or conditioned on an IPO (except pursuant to a Private Placement), a DPO (including a Qualified DPO, except pursuant to a Private Placement) or a SPAC Transaction, the Company shall, in compliance with and subject to all applicable laws and regulations, offer Investor (or one or more of its affiliates designated by Investor) a right (but not an obligation) to purchase or otherwise acquire up to 10% of the total number of securities to be offered or sold in such private placement transaction, at the same price and on the same terms offered to the other investors in such private placement transaction (and such terms shall include, without limitation, customary resale registration rights); provided, however, that while the parties anticipate that such private placement transaction would not be subject to the right of first offer contained in Section 4.1 of the IRA, in the event such right of first offer applied to such private placement transaction, then any amounts purchased by Investor pursuant to such right of first offer contained in the IRA shall count toward (and thereby reduce) the amount of securities that Investor shall have the right to purchase in such private placement transaction pursuant to this Section 4.

5. **Beneficial Ownership Limitation**. If, as a result of Investor's exercise of its participation rights set forth herein in connection with an IPO, a DPO (including a Qualified DPO) or a SPAC Transaction, Investor would beneficially own (as calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")) more than 9.99% of the outstanding shares of a class of voting equity securities of the Company, the SPAC or a parent or subsidiary of the SPAC, as applicable, that is registered as a class under Section 12 of the Exchange Act (the "**Public Shares**") as of immediately following the IPO, DPO or SPAC Transaction, as applicable, the Company and Investor shall work together in good faith to use commercially reasonable efforts, in compliance with and subject to all applicable laws and regulations, to restructure Investor's holdings such that Investor will not beneficially own more than 9.99% of the outstanding Public Shares as of immediately following the IPO, DPO or SPAC Transaction, as applicable, with the remainder of Investor's shares to be converted into non-voting shares or warrants convertible or exercisable at Investor's option into Public Shares only if such conversion or exercise would not result in Investor beneficially owning more than 9.99% of the then-outstanding Public Shares.

6. **Representations and Warranties.** Each party represents and warrants to the other party that (a) this Agreement has been duly authorized and executed by such party and is a valid and binding obligation of such party, enforceable against such party in accordance with its terms, and (b) the execution of this Agreement is not inconsistent with any of such party's organizational documents, or any law applicable to such party, and does not conflict with or contravene any provision of, or constitute a default under, any contract or other instrument to which such party is a party or by which it is bound.

7. **Severability.** The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

8. **Amendments; Termination**. This Agreement may not be modified, amended, or terminated, in whole or in part, except by an agreement in writing signed by the parties hereto. The Company acknowledges and agrees that this Agreement shall not be amended, waived, canceled, terminated or superseded by any amendment to, or any restatement of, the Purchase Agreement or the IRA, or by any other agreement entered into on or after the date hereof (whether or not it includes an integration clause), except with the prior written consent of Investor which expressly states that this Agreement is so amended, terminated or superseded. Whether or not Investor exercises any of its participation rights under Section 1, 2, 3, or 4 of this Agreement, this Agreement shall automatically terminate and be of no further force or effect upon the first to occur of (i) consummation of an IPO (and, if applicable, the Private Placement), (ii) consummation of a Qualified DPO (and, if applicable, the Private Placement), (iii) consummation of a SPAC Transaction, (iv) consummation of a Deemed Liquidation Event (as defined in the Certificate of Incorporation), or (v) such time as Investor and its Affiliates no longer hold any of securities of the Company; provided that, in the case of the foregoing clauses (i) through (iv), such termination shall not be effective until the Company has fulfilled all of its obligations under this Agreement with respect to such IPO (and, if applicable, the Private Placement), Qualified DPO, SPAC Transaction, or Deemed Liquidation Event, as applicable.

9. **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law), or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

10. **Assignment; Successors and Assigns**. This Agreement and all rights and obligations of Investor hereunder are personal to Investor and, except for transfers or assignments to Affiliates and as otherwise expressly provided for herein, may not be transferred or assigned by Investor at any time without the Company's prior written consent. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and permitted assigns.

11. **Governing Law**. The governing law and dispute resolution provisions set forth in Section 6.3 and 6.12 of the Purchase Agreement are incorporated by reference herein, *mutatis mutandis*.

(*The remainder of this page left intentionally blank.*)

Please confirm your agreement to the terms of this Agreement by counter-signature where indicated below.

Sincerely,

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

Accepted by:

RIDGEBACK CAPITAL INVESTMENTS LP

By: RIDGEBACK CAPITAL MANAGEMENT LLC its Fund Manager

By: /s/ Christian Sheldon
Name: Christian Sheldon
Title: COO

Exhibit 10.65

March 2, 2021

Zone III Healthcare Holdings, LLC
c/o Farallon Capital Management, L.L.C.
One Maritime Plaza, Suite 2100
San Francisco, CA 94111
Attn: Philip Dreyfuss

Re: Participation Rights

This letter agreement (this "**Agreement**") memorializes the agreement and understanding between Zone III Healthcare Holdings, LLC ("**Investor**"), on the one hand, and Caribou Biosciences, Inc., a Delaware corporation (the "**Company**"), on the other hand, regarding the Company's grant to Investor of the right to participate in the Company's future initial public offering of its equity securities on the terms, and subject to the conditions, set forth below.

The Company is entering into this Agreement as a material inducement to cause Investor to enter into that certain Series C Preferred Stock Purchase Agreement, dated as of the date hereof, by and among the Company, Investor, and the other purchasers named therein (the "**Purchase Agreement**"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Purchase Agreement and, to the extent not defined therein, such terms shall have the meanings ascribed to them in that certain Second Amended and Restated Investors' Rights Agreement, dated as of the date hereof, by and among the Company, Investor, and the parties named therein (the "**IRA**").

In consideration of the foregoing and the mutual promises and covenants hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, by execution of this Agreement, the parties hereto hereby agree as follows:

1. **Public Offering Participation Right.** In connection with the Company's sale of shares of its voting common stock ("**Common Stock**") to the public in the first to occur of (a) the Company's first firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act (an "**IPO**") where a majority of the shares sold in such offering are newly issued shares of the Company or (b) the Company's first "direct public offering" pursuant to an effective registration statement under the Securities Act (a "**DPO**") where (i) a majority of the shares sold in such offering are newly issued shares of the Company, (ii) the price per share to the public is at least $21.572 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), and (iii) the gross proceeds to the Company are at least $50,000,000 (a "**Qualified DPO**"), the Company shall, within a reasonable period of time preceding the consummation of such IPO or Qualified DPO and in compliance with and subject to all applicable laws and regulations, use commercially reasonable efforts to provide Investor with the opportunity to purchase shares of Common Stock to be sold by the Company (for the avoidance of doubt, in such Qualified DPO, Investor's participation right shall not apply to the sale by any securityholders of their shares), in such IPO or Qualified DPO (including, in the case of an IPO, any over-allotment option by the underwriters to such IPO, if any (the "**Overallotment Option**")) at the same price per share at which the Common Stock offered in such IPO or Qualified DPO are being offered to the public (the "**Public Price**") (such right, the "**Public Offering Participation Right**"). If Investor exercises its Public Offering Participation Right, Investor shall have the right to purchase up to a number of shares of Common Stock to be sold in such IPO (excluding the Overallotment Option, if any) or Qualified DPO equal to ten percent (10%) (the "**Participation Right Percentage**") of the aggregate number of shares of Common Stock to be sold by the Company in such IPO (excluding, the Overallotment Option, if any) or Qualified DPO. In the case of an IPO, in the event that any additional shares of Common Stock are sold by the Company in any exercise by the IPO underwriters of the Overallotment Option, then if Investor has exercised its Public Offering Participation Right in connection with the IPO, Investor shall have the right to purchase up to a number of shares of Common Stock to be sold pursuant to the Overallotment Option equal to the Participation Right Percentage of the aggregate number of shares of Common Stock to be sold by the Company pursuant to the Overallotment Option. Notwithstanding the preceding two sentences, in the event that in exercising the Public Offering Participation Right the number of shares of Common Stock held by Investor (including all shares of

Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by Investor) after such purchase(s) pursuant to the Public Offering Participation Right (and after giving effect to the consummation of the IPO or Qualified DPO) would exceed ten percent (10%) of the total Common Stock then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities) after giving effect to the consummation of the IPO, the Company and Investor shall comply with Section 5 below. Investor may assign its Public Offering Participation Right to any of its Affiliates; provided, however, that the number of shares of Common Stock that may be purchased by Investor and its Affiliates in the aggregate pursuant to the Public Offering Participation Right and any assignment(s) thereof shall not exceed the number of shares of Common Stock that Investor was originally entitled to purchase pursuant to the Public Offering Participation Right. For the avoidance of doubt, nothing in this Section 1 is intended to limit the number of shares that Investor or its Affiliates may acquire in the IPO outside of its Public Offering Participation Right. Unless the context otherwise requires or is expressly provided otherwise, references in this Agreement to the IPO shall include any exercised Overallotment Option. For the avoidance of doubt, the rights described in this Section 1 and Section 2 below shall apply only to the first to occur of an IPO or a Qualified DPO, in each case where a majority of the shares sold in such offering are newly issued shares of the Company, and shall not apply to any subsequent offering of the Company's securities. Notwithstanding anything to the contrary herein, if the Company proposes to consummate a DPO that is not a Qualified DPO, the Company shall give Investor reasonable advance notice of such DPO and the proposed terms, and Investor shall have the right (in its sole discretion) to elect to deem such DPO to be a Qualified DPO for all purposes under this Agreement.

2. **Private Sale Participation Right.**

(a) Notwithstanding Section 1 above, in the event that either (i) the Company is advised by its outside legal counsel, the Securities and Exchange Commission (the "**SEC**"), the Financial Industry Regulatory Authority ("**FINRA**"), or any stock exchange on which the Common Stock is to be traded (the "**Exchange**") that the offering or sale of the Company's securities to Investor as described above in Section 1 would violate any federal or state securities laws or the rules or regulations of the SEC, FINRA, or the Exchange, (ii) in the case of an IPO, the managing underwriter(s) reasonably determines that marketing factors require a limitation on the number of shares of Common Stock to be underwritten in connection with the IPO and request(s) that Investor's Public Offering Participation Right be subject to carve-backs, restrictions, or other limitations, or (iii) in the case of a Qualified DPO, the Company reasonably determines in good faith that such marketing factors require a limitation on the number of shares of Common Stock to be sold by the Company in connection with the Qualified DPO and request(s) that Investor's Public Offering Participation Right be subject to carve-backs, restrictions, or other limitations (each of the events described in the foregoing clauses (i), (ii) or (iii), a "**Cutback**"), then, in each case, the Company shall offer to Investor the right to purchase in a separate private placement (the "**Private Placement**") (which shall be conducted concurrently with the IPO or Qualified DPO, as applicable, and the closing of which shall be contingent on the closing of such IPO or Qualified DPO), at the Public Price, up to that number of shares of Common Stock equal to the difference between the number of shares of Common Stock that Investor would have been able to purchase pursuant to the Public Offering Participation Right in Section 1 above but for the applicable Cutback, and the number of shares of Common Stock that Investor was actually permitted to purchase in such IPO or Qualified DPO pursuant to Section 1, if any (the "**Private Sale Participation Right**"). Notwithstanding anything to the contrary set forth above, (A) no such Cutback under the foregoing clause (ii) or (iii) shall be imposed on Investor unless the number of shares of Common Stock that would otherwise be purchased by any other individual or entity to which the Company has granted, pursuant to a binding written agreement, rights similar to the Public Offering Participation Right (the "**Other Participating Investors**"), excluding the other Lead Investors, has been cutback to zero, and (B) if any Cutback under the foregoing clause (ii) or (iii) shall be imposed on Investor, such Cutback shall apply equally to the other Lead Investors with respect to the number of shares of Common Stock that Investor and the other Lead Investors are prohibited from purchasing upon exercise of their respective rights. Investor may assign its Private Sale Participation Right to any of its Affiliates; provided, however, that the number of shares of Common Stock that may be purchased by Investor and its Affiliates in the aggregate pursuant to the Private Sale Participation Right and any assignment(s) thereof shall not exceed the number of shares of Common Stock that Investor was originally entitled to purchase pursuant to the Private Sale Participation Right. Any shares of Common Stock that Investor purchases in a Private Placement shall be exempt from the registration requirements of the Securities Act.

(b) Notwithstanding the foregoing, Investor agrees that (i) in no event shall the Private Sale Participation Right be exercised in such a manner that, in the reasonable determination of the managing underwriter(s), would materially and adversely affect the IPO or, in the case of a Qualified DPO, in the reasonable good faith determination of the Company, would materially and adversely affect the Qualified DPO, and (ii) the number of shares Investor is entitled to purchase may be reduced or modified only to the extent reasonably requested by the Company's underwriter(s) (or by the Company in the case of the Qualified DPO) as to not cause such material and adverse effect on the IPO or Qualified DPO, as the case may be; provided, however, that (A) the number of shares of Common Stock that Investor is entitled to purchase may not be reduced or modified unless the number of shares of Common Stock that would otherwise be purchased in the Private Placement by any Other Participating Investors, excluding the other Lead Investors, has been reduced to zero, and (B) if any such reduction or modification shall be imposed on Investor, such reduction or modification shall apply equally to the other Lead Investors with respect to the number of shares of Common Stock that Investor and the other Lead Investors are prohibited from purchasing upon exercise of their respective rights.

(c) If Investor exercises its Private Sale Participation Right, the Company and Investor shall execute and deliver such documents that are (i) customary for a transaction structured as a concurrent private placement with a public offering, including without limitation customary resale registration rights, and (ii) reasonably satisfactory to the Company, Investor, and the managing underwriter(s), if applicable.

3. **SPAC Transaction Participation Right**. If the Company proposes to enter into a SPAC Transaction (as defined in the Certificate of Incorporation), and the SPAC (as defined in the Certificate of Incorporation) (or a parent or subsidiary of the SPAC) proposes to offer or sell securities in a private placement transaction that is contemporaneous with, or otherwise connected to or conditioned on, such SPAC Transaction, the Company will use its commercially reasonable efforts, in compliance with and subject to all applicable laws and regulations, to ensure that Investor (or one or more of its affiliates designated by Investor) is given the opportunity to purchase or otherwise acquire up to 10% of the total number of securities to be offered or sold in such private placement transaction, at the same price and on the same terms offered to the other investors in such private placement transaction (and for such terms to include, without limitation, customary resale registration rights). The Company acknowledges and agrees that, for purposes of this Section 3, commercially reasonable efforts shall include requesting that the sponsor or management of the SPAC (or of such parent or subsidiary of the SPAC) acknowledge and consider providing the benefit of such participation rights to Investor (or one or more of its affiliates designated by Investor) in accordance with the immediately preceding sentence.

4. **Private Placement Participation Right**. If the Company proposes to offer or sell securities in a private placement transaction that is substantially contemporaneous with or conditioned on an IPO (except pursuant to a Private Placement), a DPO (including a Qualified DPO, except pursuant to a Private Placement) or a SPAC Transaction, the Company shall, in compliance with and subject to all applicable laws and regulations, offer Investor (or one or more of its affiliates designated by Investor) a right (but not an obligation) to purchase or otherwise acquire up to 10% of the total number of securities to be offered or sold in such private placement transaction, at the same price and on the same terms offered to the other investors in such private placement transaction (and such terms shall include, without limitation, customary resale registration rights); provided, however, that while the parties anticipate that such private placement transaction would not be subject to the right of first offer contained in Section 4.1 of the IRA, in the event such right of first offer applied to such private placement transaction, then any amounts purchased by Investor pursuant to such right of first offer contained in the IRA shall count toward (and thereby reduce) the amount of securities that Investor shall have the right to purchase in such private placement transaction pursuant to this Section 4.

5. **Beneficial Ownership Limitation**. If, as a result of Investor's exercise of its participation rights set forth herein in connection with an IPO, a DPO (including a Qualified DPO) or a SPAC Transaction, Investor would beneficially own (as calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")) more than 9.99% of the outstanding shares of a class of voting equity securities of the Company, the SPAC or a parent or subsidiary of the SPAC, as applicable, that is registered as a class under Section 12 of the Exchange Act (the "**Public Shares**") as of immediately following the IPO, DPO or SPAC Transaction, as applicable, the Company and Investor shall work together in good faith to use commercially reasonable efforts, in compliance with and subject to all applicable laws and regulations, to restructure Investor's holdings such that Investor will not beneficially own more than 9.99% of the outstanding Public Shares as of

immediately following the IPO, DPO or SPAC Transaction, as applicable, with the remainder of Investor's shares to be converted into non-voting shares or warrants convertible or exercisable at Investor's option into Public Shares only if such conversion or exercise would not result in Investor beneficially owning more than 9.99% of the then-outstanding Public Shares.

6. **Representations and Warranties.** Each party represents and warrants to the other party that (a) this Agreement has been duly authorized and executed by such party and is a valid and binding obligation of such party, enforceable against such party in accordance with its terms, and (b) the execution of this Agreement is not inconsistent with any of such party's organizational documents, or any law applicable to such party, and does not conflict with or contravene any provision of, or constitute a default under, any contract or other instrument to which such party is a party or by which it is bound.

7. **Severability.** The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

8. **Amendments; Termination**. This Agreement may not be modified, amended, or terminated, in whole or in part, except by an agreement in writing signed by the parties hereto. The Company acknowledges and agrees that this Agreement shall not be amended, waived, canceled, terminated or superseded by any amendment to, or any restatement of, the Purchase Agreement or the IRA, or by any other agreement entered into on or after the date hereof (whether or not it includes an integration clause), except with the prior written consent of Investor which expressly states that this Agreement is so amended, terminated or superseded. Whether or not Investor exercises any of its participation rights under Section 1, 2, 3, or 4 of this Agreement, this Agreement shall automatically terminate and be of no further force or effect upon the first to occur of (i) consummation of an IPO (and, if applicable, the Private Placement), (ii) consummation of a Qualified DPO (and, if applicable, the Private Placement), (iii) consummation of a SPAC Transaction, (iv) consummation of a Deemed Liquidation Event (as defined in the Certificate of Incorporation), or (v) such time as Investor and its Affiliates no longer hold any of securities of the Company; provided that, in the case of the foregoing clauses (i) through (iv), such termination shall not be effective until the Company has fulfilled all of its obligations under this Agreement with respect to such IPO (and, if applicable, the Private Placement), Qualified DPO, SPAC Transaction, or Deemed Liquidation Event, as applicable.

9. **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law), or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

10. **Assignment; Successors and Assigns**. This Agreement and all rights and obligations of Investor hereunder are personal to Investor and, except for transfers or assignments to Affiliates and as otherwise expressly provided for herein, may not be transferred or assigned by Investor at any time without the Company's prior written consent. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and permitted assigns.

11. **Governing Law**. The governing law and dispute resolution provisions set forth in Section 6.3 and 6.12 of the Purchase Agreement are incorporated by reference herein, *mutatis mutandis*.

(*The remainder of this page left intentionally blank.*)

Please confirm your agreement to the terms of this Agreement by counter-signature where indicated below.

Sincerely,

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz
Name: Rachel E. Haurwitz
Title: President and Chief Executive Officer

Accepted by:

ZONE III HEALTHCARE HOLDINGS, LLC

By: Farallon Capital Management, L.L.C., its Manager

By: /s/ Philip Dreyfuss
Name: Philip Dreyfuss
Title: Authorized Signatory

Exhibit 21.1

Subsidiaries of Caribou Biosciences, Inc.

Entity	State or Jurisdiction of Incorporation or Organization
Antler Holdco, LLC	Delaware
Arboreal Holdco, LLC	Delaware
Biloba Holdco, LLC	Delaware
Microbe Holdco, LLC	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Registration Statement on Form S-1 of our report dated May 7, 2021, relating to the financial statements of Caribou Biosciences, Inc. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ Deloitte & Touche LLP

San Francisco, California

July 1, 2021