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As confidentially submitted to the Securities and Exchange Commission on September 4, 2015. This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains confidential.

Registration No. 333-

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

FORM S-1
REGISTRATION STATEMENT
Under
The Securities Act of 1933

INTELLIA THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**2836**	**36-4785571**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

130 Brookline Street, Suite 201
Cambridge, MA 02139
(857) 285-6200
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Nessan Bermingham, Ph.D.
Founder, President and Chief Executive Officer
130 Brookline Street, Suite 201
Cambridge, Massachusetts 02139
(857) 285-6200
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Arthur R. McGivern, Esq. **William D. Collins, Esq. Goodwin Procter LLP** **Exchange Place** **Boston, Massachusetts 02109** **(617) 570-1000**	**José E. Rivera, Esq.** **Chief Operating Officer and Chief Legal Officer** **Intellia Therapeutics, Inc.** **130 Brookline Street, Suite 201** **Cambridge, Massachusetts 02139** **(857) 285-6200**	**Peter N. Handrinos, Esq.** **Brandon J. Bortner, Esq.** **Latham & Watkins LLP** **John Hancock Tower** **200 Clarendon Street** **Boston, Massachusetts 02116** **(617) 948-6000**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-Accelerated Filer (Do not check if a smaller reporting company)	☒	Smaller Reporting Company	☐

CALCULATION OF REGISTRATION FEE

Title of each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common Stock, par value $0.0001 per share	$	$

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

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 that 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 this 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. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED SEPTEMBER 4, 2015

Shares

Common Stock

This is the initial public offering of shares of our common stock. Prior to this offering, there has been no public market for our common stock. We are selling shares of our common stock. The initial public offering price of our common stock is expected to be between $ and $ per share.

We intend to apply to list our common stock on The NASDAQ Global Market under the symbol "ITTX."

The underwriters have an option to purchase a maximum of additional shares of common stock from us.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves risks. See "Risk Factors" on page 12.

	Price to Public	Underwriting Discounts and Commissions	Proceeds to Intellia Therapeutics, Inc.
Per Share	$	$	$
Total	$	$	$

(1) See "Underwriting" beginning on page 137 of this prospectus for additional information regarding underwriting compensation.

Delivery of the shares of common stock will be made on or about , 2015.

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.

Credit Suisse **Jefferies** **Leerink Partners**

Wedbush PacGrow Healthcare

The date of this prospectus is , 2015

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Through and including , 2015 (25 days after the commencement of this offering), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

You should rely only on the information contained in this prospectus or in any free writing prospectus we file with the Securities and Exchange Commission. Neither we nor the underwriters have authorized anyone to provide you with information other than that contained in this prospectus or any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell, and seeking offers to buy, common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front cover page of this prospectus, or other earlier date stated in this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

The market data and certain other statistical information used throughout this prospectus are based on independent industry publications, governmental publications, reports by market research firms or other independent sources that we believe to be reliable sources. Although we believe that these sources are reliable, we have not independently verified the information contained in such publications. While we are not aware of any misstatements regarding any third-party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under the section entitled "Risk Factors" and elsewhere in this prospectus. Some data are also based on our good faith estimates.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our consolidated financial statements and the related notes included elsewhere in this prospectus. You should also consider, among other things, the matters described under "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case appearing elsewhere in this prospectus.

On August 20, 2015, Intellia Therapeutics, LLC, a Delaware limited liability company, merged with and into Intellia Therapeutics, Inc., a Delaware corporation and the issuer of the shares of common stock offered by this prospectus, which merger we refer to as the Reorganization. As used in this prospectus, unless the context otherwise requires, references to the "Company," "Intellia," "we," "us" and "our" refer to (i) prior to the date of the Reorganization, Intellia Therapeutics, LLC and its wholly owned, consolidated subsidiary, or either or both of them as the context may require, and (ii) following the date of the Reorganization, Intellia Therapeutics, Inc.

Overview

We are a leading gene editing company focused on the development of proprietary, potentially curative therapeutics utilizing a recently developed biological tool known as the CRISPR/Cas9 system. We believe that the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course. We intend to leverage our leading scientific expertise, clinical development experience and intellectual property position to unlock broad therapeutic applications of CRISPR/Cas9 gene editing and develop a potential new class of therapeutic products.

In 2012, one of our co-founders, Dr. Jennifer Doudna, and her colleagues published a paper in the journal *Science* describing the use of CRISPR/Cas9 as a gene editing tool. Gene editing is the precise and targeted modification of the genetic material of cells. Since the publication of Dr. Doudna's landmark paper, more than 1,500 research papers have been published on the CRISPR/Cas9 technology. The CRISPR/Cas9 system offers a revolutionary approach for therapeutic development due to its broad potential to precisely edit genes. This system can be used to make three general types of edits: knockouts, repairs and insertions. Each of these editing strategies takes advantage of naturally occurring biological mechanisms to effect the desired genetic alteration. This approach has the potential to provide curative therapeutic options for patients with chronic diseases by addressing the underlying cause of the disease.

Unlike earlier-generation gene editing technologies, the CRISPR/Cas9 system is simpler and involves a single protein, Cas9, that can be directed by an appropriate RNA guide sequence to precisely cleave a target DNA sequence. Therefore, CRISPR/Cas9-based therapeutics have the potential to be highly efficient, selective and scalable.

We believe that CRISPR/Cas9 offers significant technical advantages and broader potential to edit genes over other gene editing methods. Such advantages include:

- higher selectivity and cleavage efficiency;
- simpler tools allowing for rapid scaling and optimization;
- more efficient path to achieve preclinical proof-of-concept;
- broader applicability to *in vivo* and *ex vivo* therapies;
- greater potential for single curative treatment;
- greater ability to address almost any site in the genome; and
- ability to target multiple DNA sites simultaneously.

We believe we are well positioned to maximize the potential of the CRISPR/Cas9 system to develop therapeutics based on the following.

- ***Strong Product Focus***. We are focused on the development of potentially curative therapeutic products through the application of the CRISPR/Cas9 system for the treatment of patient populations with significant unmet needs. We are targeting both *in vivo* and *ex vivo* applications in parallel to build a pipeline across a range of indications and to generate a wealth of data that expands the potential therapeutic applications of the CRISPR/Cas9 technology across a broad range of diseases.
- ***Deep Management Expertise in Discovering and Developing New Therapeutics.*** We have assembled a world-class team of executives, founders and advisors who are dedicated to the development of CRISPR/Cas9-based therapeutic products for patients with significant unmet medical need. Led by Nessan Bermingham, Ph.D., our Founder and Chief Executive Officer, John M. Leonard, M.D., our Chief Medical Officer, and José E. Rivera, our Chief Operating Officer and Chief Legal Officer, our team's expertise spans CRISPR/Cas9 and broader gene editing technologies, *in vivo* and *ex vivo* therapeutic delivery technologies, preclinical and clinical development, product scale-up and manufacturing, cell and molecular biology, intellectual property, finance and regulatory affairs.
- ***Strong Product-Focused Partnerships to Accelerate Path to Clinic.*** The potential application of CRISPR/Cas9 is extremely broad, and we plan to continue to identify partners who can contribute meaningful resources and insights to our programs and allow us to more rapidly expand our impact to broader patient populations. Our partnership focusing on CAR T cells with Novartis Institutes for Biomedical Research, Inc., or Novartis, exemplifies this strategy.
- ***Risk-Mitigated Approach to Accelerate Product Development Path for CRISPR/Cas9 Technology.*** Our selection criteria for our initial indications position us to build a risk-diversified pipeline, where we are not reliant on any single delivery technology or editing approach for success. Our approach allows us to apply the learnings from each of our lead programs to support multiple value drivers thereby increasing the probabilities of success in our initial indications, generating insights that will accelerate the development of subsequent therapeutic products and broadening the opportunity for potential strategic alliances.
- ***Delivery Expertise.*** With our team's expertise with lipid nanoparticle, or LNP, delivery technology, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans.
- ***Leading Intellectual Property Position.*** Our licensed patent portfolio encompasses foundational filings on the use of CRISPR/Cas9 systems for gene editing, improvements and modifications of these systems and their components, LNP technologies for delivering protein/nucleic acid complexes and RNA into cells and cell expansion technology relevant to stem cell-based therapies.

Our Pipeline

We plan to use the CRISPR/Cas9 system across two broad areas: *in vivo* applications, in which CRISPR/Cas9 therapeutic products are delivered directly to target cells within the body, and *ex vivo* applications, in which cells are removed from a patient's body, modified using CRISPR/Cas9 and then returned to the patient. To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk-mitigated approach to selecting our initial indications, which we refer to as our sentinel indications, that have significant unmet medical need and relatively low technical and development hurdles based on four primary axes:

- the type of edit – knockout, repair or insertion;
- the presence of established therapeutic endpoints;
- the delivery modality for *in vivo* and *ex vivo* applications; and
- the appropriate CRISPR/Cas9 complex.

We are targeting sentinel indications using *in vivo* and *ex vivo* approaches to demonstrate proof-of-concept of the various facets of our technology, including delivery, type of edit, and selectivity and efficiency. The learnings we gain from each indication will pave the way for rapid expansion of our pipeline by targeting subsequent indications that use the same or analogous delivery vehicles, guide structures and types of edits.

The following table illustrates our current discovery programs and opportunities:

	Intellia Rights	Type of Edit	Upcoming Milestones: Next 12–24 Months
In Vivo			
Delivery			
Lipid Nanoparticle	Proprietary	Knockout, repair	Demonstrate *in vivo* delivery first with knockout editing, followed by more complex repair editing
Programs			
Hepatitis B Virus	Proprietary	Knockout	Demonstrate *in vivo* proof-of-concept
Alpha-1 Antitrypsin Deficiency	Proprietary	Knockout, repair	Demonstrate *in vivo* proof-of-concept
Inborn Errors of Metabolism	Proprietary	Knockout, repair, insertion	Select lead indication based on *in vitro* data
Ex Vivo			
Programs			
CAR T Cells	Partnered with Novartis	Undisclosed	Advance preclinical development
Hematopoietic Stem Cells	Proprietary and others selectively partnered with Novartis	Undisclosed	Advance preclinical development

In Vivo *Pipeline*

We have chosen three sentinel *in vivo* programs employing different editing strategies to explore the scope of the gene edits through the CRISPR/Cas9 system:

- Hepatitis B virus, or HBV, program, which utilizes a knockout strategy to target covalently closed circular DNA, or cccDNA;
- Alpha-1 antitrypsin deficiency, or AATD, program, which utilizes either a gene knockout strategy or a gene repair strategy; and
- Inborn errors of metabolism, or IEM, program, which has the potential to utilize all three editing approaches, including targeted DNA insertion.

Our initial efforts on *in vivo* delivery approaches focus on the use LNPs for delivery of the CRISPR/Cas9 complex to the liver. We see multiple advantages of using LNPs as our initial *in vivo* delivery vehicles, particularly as being optimized by us for delivery of the CRISPR/Cas9 system. Certain LNPs have demonstrated efficacy, safety and favorable tolerability and are currently used as a delivery system for therapeutic small interfering RNA (siRNA) as well as therapeutic messenger RNA (mRNA). With our team's expertise with LNP delivery technology, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans. As we progress our sentinel *in vivo* liver programs with LNP delivery, we are actively investigating multiple viral delivery vectors, which will allow us to explore therapies for indications that require delivery to organs beyond the liver.

Hepatitis B Virus Program (Knockout Strategy)

Hepatitis B is an infection of the liver caused by HBV, which can progress from acute to chronic infection in approximately 5-10% of infected adults. We believe we can use the CRISPR/Cas9 system to help eliminate the reservoirs of cccDNA, the source of chronic infection, which cannot be eradicated by current treatments, in HBV-infected patients. We intend to evaluate different knockout approaches to destroy or render inactive cccDNA *in vivo*, including cleaving the cccDNA at a single site or at combinations of sites. We believe it is also possible that a common treatment solution can be developed for all genotypes of HBV because we can target portions of the cccDNA sequences that are the same across genotypes. In addition, there is potential to reduce viral resistance as the virus itself is eradicated. We have completed a bioinformatics analysis of potential CRISPR/Cas9 target sites in the HBV genome to select a set of guide RNAs, including several that can be effective across all HBV genotypes. We are commencing *in vitro* proof-of-concept studies using our lead guide RNAs in the near term and expect to complete proof-of-concept studies in an HBV mouse model in 2016.

Alpha-1 Antitrypsin Deficiency Program (Knockout and Repair Strategies)

AATD is an inherited genetic disorder that may cause lung or liver disease. The lung disease may result in chronic obstructive pulmonary disease (COPD), while the liver disease is characterized by inflammation of the liver. In the United States, an estimated 60,000 to 100,000 people have AATD, which arises when patients have a mutation in both copies of the SERPINA1 gene. We believe that we can apply the CRISPR/Cas9 technology to cure AATD by addressing the defective SERPINA1 gene. We intend to evaluate two editing approaches – a knockout and a repair – which will address either the liver disease or both the lung and liver diseases, respectively. We expect the progress of our AATD repair program to follow our AATD knockout program. We have begun discovery efforts for both the knockout and repair approaches and expect to complete proof-of-concept studies in mouse models for the knockout approach in 2016.

Inborn Errors of Metabolism Program (Knockout, Repair and Insertion Strategies)

Individual IEMs are rare disorders, many having an incidence of fewer than 1 in 100,000 births, which typically involve defects in single genes that code for enzymes that drive the metabolic machinery of the cell. We are evaluating a large set of candidate IEMs, including argininosuccinic lyase deficiency, ornithine transcarbamylase deficiency and maple syrup urine disease. Our selection criteria for our initial IEM indications include identifying diseases that originate in the liver, have well-defined mutations that can be addressed by a single knockout, repair or insertion approach, have readily measurable therapeutic endpoints with observable clinical responses, and for which there are no effective treatments. We expect to select a lead IEM indication based on *in vitro* data in 2016.

Ex Vivo *Pipeline*

Our sentinel *ex vivo* programs are in CAR T cell and HSC applications. Our sentinel *ex vivo* programs will help inform the broader applicability of CRISPR/Cas9 in an *ex vivo* setting, particularly in other relevant types of immune cells, such as natural killer (NK) cells and tumor infiltrating lymphocytes (TILs) for immuno-oncology applications, T regulatory cells (Tregs) for autoimmune disorders and other cell types, including induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells for tissue-targeted treatments. For our *ex vivo* programs requiring delivery to extracted cells such as HSCs or T cells, we initially plan to deliver the CRISPR/Cas9 complex by electroporation, an electrical charge-based technique for delivering molecules into cells. In parallel with electroporation, we are exploring several newer technologies for delivery to cells *ex vivo*, which may provide advantages in delivery efficiency or cell viability.

CAR T Cell Program

In CAR T cell therapy, naturally occurring immune cells, specifically T cells, are modified *ex vivo* by inserting a chimeric antigen receptor, or CAR, to selectively target cancer cells and activate an immune response against them. We believe CRISPR/Cas9 can further enhance CAR T cells by, for example, generating a universal donor CAR T cell or modifying immune checkpoint pathways.

HSC Program

For our HSC programs, we intend to apply CRISPR/Cas9 to correct defective proteins in HSCs of a given patient for the potential treatment of blood disorders or primary immune deficiencies. Challenges of developing stem cell products include the relatively low quantity of available cells for treatment and a limited ability to expand HSCs *ex vivo*. We expect to counter these challenges by employing a proprietary small molecule for HSC expansion to which Novartis has granted us rights. This compound could allow us to generate large numbers of HSCs for re-implantation in patients after editing. We are also pursuing a number of potential gene targets and therapeutic indications in collaboration with Novartis. Our selection criteria for development programs include, among others, disease severity, existing treatment options, delivery efficiency, the nature of the genetic edit required and the expected performance of cells modified by the procedure.

Under our strategic collaboration with Novartis, our CAR T cell program is exclusive to Novartis. We retain the right to develop and commercialize certain of the HSC programs that we discover with Novartis, while others will be proprietary to Novartis. Under this collaboration agreement, we received an upfront technology access payment of $10.0 million and are entitled to an additional $40.0 million, in aggregate, in additional technology access fees and research payments during the five-year collaboration term. In addition, we are eligible to earn up to $230.3 million in development, regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis for the products developed by Novartis.

Strategy

Our goal is to build a fully integrated, product-driven biotechnology company, focused on developing and commercializing potentially curative CRISPR/Cas9-based therapeutics. Our approach to advancing the broad potential of gene editing includes our plans to:

- focus on sentinel indications that enable us to fully develop the potential of the CRISPR/Cas9 system;
- aggressively pursue *in vivo* liver indications to develop therapeutics rapidly with existing delivery technology;
- continue to develop and expand our *ex vivo* therapeutic programs;
- continue to leverage strategic partnerships to accelerate clinical development; and
- grow our leadership position in the field of gene editing.

Recent Series B Financing

To enable further development of our technology and *in vivo* and *ex vivo* programs, we completed a private placement for gross proceeds of $70.0 million of our Series B preferred stock in August 2015 led by OrbiMed HealthCare Fund Management. Additional investors in this financing included Fidelity Management & Research, Janus Capital Management, Foresite Capital, Sectoral Asset Management, EcoR1 Capital LLC, our existing investors, Atlas Venture Fund IX, LP and Novartis, as well as other leading mutual fund and healthcare investors.

Risks Associated With Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the section entitled "Risk Factors" appearing immediately following this prospectus summary. These risks include the following:

- CRISPR/Cas9 gene editing technology is a novel technology that is not yet proven or clinically validated for human therapeutic use. If we are unable to develop viable product candidates, achieve regulatory approval for any such product candidate, or market and sell any product candidates, we may never achieve profitability.
- Our ability to generate product revenue is dependent on the success of our application of CRISPR/Cas9 technology for human therapeutic use, which is at an early stage of development and will require significant additional discovery efforts, preclinical testing and clinical studies, as well as applicable regulatory guidance for preclinical and clinical studies from the U.S. Food and Drug Administration and other regulatory authorities, before we can seek regulatory approval and begin commercial sales of any potential product candidates.
- Negative public opinion and increased regulatory scrutiny of gene editing therapies may damage public perception of the safety of any product candidates that we develop and adversely affect our ability to conduct clinical trials or obtain regulatory approvals for such product candidates.
- Third-party claims of intellectual property infringement against us, our licensors or our collaborators may prevent or delay our product discovery and development efforts.
- We may not be successful in our efforts to use and enhance our gene editing technology to create a pipeline of product candidates and develop commercially successful products, or we may expend our limited resources on programs that do not yield a successful product candidate.
- We face significant competition in an environment of rapid technological change. We are aware of at least three other CRISPR/Cas companies and five gene editing companies with platforms other than CRISPR/Cas. The possibility that one or more of our competitors may develop therapies that are more effective than ours or achieve regulatory approval before us may harm our business and financial condition.
- We have never generated any revenue from product sales, do not expect to do so in the near term and may never achieve or maintain profitability. We expect to incur losses for the foreseeable future and will need to raise substantial additional funding, even with the net proceeds expected from this offering.
- We have entered into, and may in the future enter into, collaborations with third parties to develop product candidates. If these collaborations are not successful, our business could be adversely affected.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- reduced disclosure about our executive compensation arrangements;
- no non-binding advisory votes on executive compensation or golden parachute arrangements; and
- exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering; (iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, or SEC. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. We have irrevocably elected to ‘‘opt out’’ of the exemption for the delayed adoption of certain accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Corporate History

We were incorporated under the laws of the State of Delaware in May 2014. We are the successor in interest to Intellia Therapeutics, LLC, a limited liability company formed under the laws of the State of Delaware in July 2014 and the former holder of all of our outstanding shares of stock. Our principal executive office is located at 130 Brookline Street, Suite 201, Cambridge, MA 02139, and our telephone number is (857) 285-6200. Our website address is www.intelliatx.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

We own various U.S. federal trademark applications and unregistered trademarks, including our company name. All other trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the symbols ® and ™, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

Reorganization

As more fully described in the section entitled “Reorganization” appearing elsewhere in this prospectus, on August 20, 2015, we completed a series of transactions pursuant to which Intellia Therapeutics, LLC merged with and into Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing as the surviving corporation. In connection with this merger, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC received shares of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units in Intellia Therapeutics, LLC received shares of restricted common stock in Intellia Therapeutics, Inc.

THE OFFERING

Common stock offered	shares
Common stock to be outstanding immediately after this offering	shares (shares if the underwriters exercise their option to purchase additional shares in full)
Underwriters' option to purchase additional shares	We have granted a 30-day option to the underwriters to purchase up to an aggregate of additional shares of common stock from us at the public offering price, less underwriting discounts and commissions on the same terms as set forth in this prospectus.
Use of proceeds	We estimate that we will receive net proceeds from the sale of shares of our common stock in this offering of approximately $ million, or $ million if the underwriters exercise their option to purchase additional shares in full, assuming an initial public offering price of $ per share, 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. We intend to use the net proceeds from this offering to advance the research and development of our sentinel indications, progress additional pipeline product candidates, further develop our delivery technologies and CRISPR/Cas9 gene editing platform and for working capital and other general corporate purposes. For a more complete description of our intended use of the proceeds from this offering, see "Use of Proceeds."
Risk factors	You should carefully read the "Risk Factors" section of this prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.
Proposed NASDAQ Global Market symbol	"ITTX"

The number of shares of our common stock to be outstanding after this offering is based on 44,269,269 shares of our common stock outstanding as of August 31, 2015, including 39,919,350 shares of our common stock issuable upon the automatic conversion of all outstanding shares of our preferred stock upon the closing of this offering, and excludes:

- 2,694,672 shares of common stock reserved for future issuance under our 2015 Stock Option and Incentive Plan, or the 2015 Plan; and
- shares of common stock reserved for future issuance under our 2015 Amended and Restated Stock Option and Incentive Plan, or the 2015 Restated Plan, which will become effective upon the effectiveness of the registration statement of which this prospectus is a part.

Unless otherwise indicated, all information in this prospectus gives effect to the Reorganization described in the section entitled “Reorganization” and reflects or assumes the following:

- the filing of our amended and restated certificate of incorporation upon the closing of this offering and the effectiveness of our amended and restated by-laws upon the effectiveness of the registration statement of which this prospectus is a part;
- the conversion of all of our outstanding shares of preferred stock as of August 31, 2015 into an aggregate of 39,919,350 shares of common stock upon the completion of this offering; and
- no exercise by the underwriters of their option to purchase up to additional shares of common stock in this offering.

SUMMARY CONSOLIDATED FINANCIAL DATA

The summary consolidated financial data set forth below should be read together with the consolidated financial statements and the related notes to those statements, as well as the sections entitled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." We have derived the summary consolidated statement of operations data for the period from May 7, 2014 (inception) to December 31, 2014 from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statement of operations data for the six months ended June 30, 2015 and the summary consolidated balance sheet data as of June 30, 2015 have been derived from our unaudited interim consolidated financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited consolidated financial data reflect all adjustments, which include only normal recurring adjustments, necessary for a fair presentation of the financial information in those statements. Our historical results are not necessarily indicative of results that may be expected in the future and results of interim periods are not necessarily indicative of the results for the entire year.

	Period from May 7, 2014 (inception) to December 31, 2014	Period from May 7, 2014 (inception) to June 30, 2014	Six Months Ended June 30, 2015
	(in thousands, except per unit and per share data)		
Consolidated Statements of Operations Data:			
Collaboration revenue	$ —	$ —	$ 2,663
Operating expenses:			
Research and development	1,105	11	3,337
In-process research and development	6,055	—	—
General and administrative	2,379	167	3,943
Total operating expenses	9,539	178	7,280
Loss before income taxes	(9,539)	(178)	(4,617)
Benefit from income taxes	—	—	484
Net loss	$ (9,539)	$ (178)	$ (4,133)
Net loss per common unit, basic and diluted	$ (11.55)	$ —	$ (2.96)
Net loss per incentive unit, basic and diluted	$ —	$ —	$ (2.96)
Weighted average common units outstanding, basic and diluted	826	—	1,284
Weighted average incentive units outstanding, basic and diluted	—	—	112
Pro forma net loss per share, basic and diluted (unaudited)(1)	$ (0.82)		$ (0.17)
Pro forma weighted average shares outstanding, basic and diluted (unaudited)(1)	11,589		24,095

	As of June 30, 2015		
	Actual(2)	Pro Forma(3)	Pro Forma As Adjusted(4)
		(in thousands)	
Consolidated Balance Sheet Data:			
Cash	$19,765	$ 89,782	
Working capital(5)	11,487	81,504	
Total assets	24,153	94,170	
Deferred revenue	11,694	11,694	
Total stockholders' equity	7,305	77,322	

(1) Basic and diluted pro forma net loss per share give effect to the conversion of all shares of preferred stock issued in connection with the Reorganization into shares of common stock immediately prior to the completion of this offering, assuming such conversion occurred on the later of May 7, 2014 (inception) or the issuance date of the corresponding unit that converted to preferred stock in the Reorganization.

(2) Actual amounts give effect to the Reorganization as if it occurred on June 30, 2015.

(3) Pro forma amounts reflect the Reorganization as if it occurred on June 30, 2015 and the issuance and sale of 13,336,601 shares of our Series B preferred stock in August 2015 for aggregate gross proceeds of $70.0 million.

(4) Pro forma as adjusted amounts reflect the pro forma adjustments described in footnote (3) above, as well as 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, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash, working capital, total assets and total stockholders' equity by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares offered by us would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming the assumed initial public offering price remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(5) We define working capital as current assets less current liabilities.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all other information in this prospectus, including our consolidated financial statements and related notes and "Management's Discussion and Analysis of Results of Operations and Financial Condition," before investing in our common stock. Any of the risk factors we describe below could adversely affect our business, financial condition or results of operations. The market price of our common stock could decline if one or more of these risks or uncertainties actually occur, causing you to lose all or part of the money you paid to buy our common stock. Additional risks that we currently do not know about or that we currently believe to be immaterial may also impair our business. Certain statements below are forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements" in this prospectus.

Risks Related to Our Business, Technology and Industry

CRISPR/Cas9 gene editing technology is a novel technology that is not yet clinically validated for human therapeutic use. The approaches we are taking to discover and develop novel therapeutics using CRISPR/Cas9 systems are unproven and may never lead to marketable products. If we are unable to develop viable product candidates, achieve regulatory approval for any such product candidate or market and sell any product candidates, we may never achieve profitability.

We are focused on developing potentially curative medicines utilizing the CRISPR/Cas9 gene editing technology. Although there have been significant advances in the field of gene therapy, which typically involves introducing a copy of a gene into a patient's cell, and gene editing in recent years, CRISPR-based gene editing technologies are new and largely unproven. The CRISPR/Cas9 technologies that we have licensed and that we intend to develop have not yet been clinically tested by us, nor are we aware of any clinical trials for safety or efficacy having been completed by third parties involving these technologies. The scientific evidence to support the feasibility of developing products based on these technologies is both preliminary and limited. Successful development of products by us will require solving a number of issues, including safely delivering a therapeutic into target cells safely within the human body or in an *ex vivo* setting, optimizing the efficiency and specificity of such products, and ensuring the therapeutic selectivity of such products. There can be no assurance we will be successful in solving any or all of these issues.

We have concentrated our research efforts to date on bringing CRISPR/Cas9 therapeutics to the clinic for our initial indications, which we call our sentinel indications, and our future success is highly dependent on the successful development of CRISPR-based gene editing technologies, cellular delivery methods and therapeutic applications. Our sentinel indications are the focus of our initial development efforts, and we may decide to alter or abandon these programs as new data become available and we gain experience in developing CRISPR/Cas9-based therapeutics. We cannot be sure that our CRISPR/Cas9 technologies will yield satisfactory products that are safe and effective, scalable or profitable in our sentinel indications or any other indication we pursue.

Public perception and related media coverage of potential therapy-related safety issues, including adoption of new therapeutics or novel approaches to treatment, as well as ethical concerns related specifically to gene editing and CRISPR/Cas9, may adversely influence the willingness of subjects to participate in clinical trials, or if any therapeutic is approved, of physicians to subscribe to the novel treatment mechanics. Physicians, hospitals and third-party payors often are slow to adopt new products, technologies and treatment practices that require additional upfront costs and training. Physicians may not be willing to undergo training to adopt this novel and personalized therapy, may decide the therapy is too complex to adopt without appropriate training and may choose not to administer the therapy. In addition, responses by the U.S., state or foreign governments to negative public perception or ethical concerns may result in new legislation or regulations that could limit our ability to develop or commercialize any product candidates, obtain or maintain regulatory approval or otherwise achieve profitability. Based on these and other factors, hospitals and payors may decide that the benefits of this new therapy do not or will not outweigh its costs.

Development activities in the field of CRISPR/Cas9 are currently subject to a number of risks related to the ownership and use of certain intellectual property rights that may be subject to patent interference proceedings.

For additional information regarding the risks that may apply to our and our licensors' intellectual property rights, see the section entitled "—Risks Related to Our Intellectual Property" appearing elsewhere in this prospectus for more information.

Our ability to generate product revenue is dependent on the success of our application of CRISPR/Cas9 technology for human therapeutic use, which is at an early stage of development and will require significant additional discovery efforts, preclinical testing and clinical studies, as well as applicable regulatory guidance for preclinical testing and clinical studies from the FDA and other regulatory authorities, before we can seek regulatory approval and begin commercial sales of any potential product candidates.

Our ability to generate product revenue is highly dependent on our ability to obtain regulatory approval of and successfully commercialize one or more of our product candidates. Any product candidates we discover will require preclinical, clinical and regulatory review and approval in each jurisdiction in which we intend to market the products, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing efforts before we can generate any revenue from product sales. Before obtaining marketing approval from regulatory authorities for the sale of a product candidate, we must conduct extensive clinical trials to demonstrate the safety, purity and potency, as well as the effectiveness of the product candidates in humans. We cannot be certain that any of our product candidates will be successful in clinical trials and even if successful, they may not receive regulatory approval.

Our approach to developing therapies for genetic-based and viral diseases centers on using the CRISPR/Cas9 technology to introduce or remove genetic information in order to treat various disorders. Because this is a new therapeutic approach, discovering, developing and commercializing our product candidates subject us to a number of challenges, including:

- obtaining regulatory approval from the U.S. Food and Drug Administration, or FDA, and other regulatory authorities that have very limited or no experience with the clinical development of CRISPR/Cas9 therapeutics;
- seeking and obtaining regulatory approval from the FDA and other regulatory authorities in light of no guidance regarding potential regulatory pathways for this category of therapeutics, including preclinical and clinical requirements for approval of an investigational new drug application, or IND;
- educating medical personnel regarding the potential benefits and side effect profile of each of our product candidates;
- developing processes for the safe administration of these products, including long-term follow-up for all patients who receive treatment with any of our product candidates;
- sourcing clinical and, if approved, commercial supplies for the materials used to manufacture and process our product candidates;
- developing a manufacturing process and distribution network with a cost of goods that allows for an attractive return on investment; and
- establishing sales and marketing capabilities after obtaining any regulatory approval to gain market acceptance.

Additionally, because our technology involves gene editing across multiple cell and tissue types, we are subject to many of the challenges and risks that gene therapies face, including:

- regulatory requirements governing gene and cell therapy products have changed frequently and may continue to change in the future. To date, no products that involve the genetic modification of patient cells have been approved in the United States and only one has been approved in the European Union, or EU;
- improper insertion of a gene sequence into a patient's chromosome could lead to lymphoma, leukemia or other cancers, or other aberrantly functioning cells;

- the FDA recommends a follow-up observation period of 15 years or longer for all patients who receive treatment using gene therapies, and we may need to adopt such an observation period for our product candidates; and
- clinical trials using genetically modified cells conducted at institutions that receive funding for recombinant DNA research from the U.S. National Institutes of Health, or the NIH, are subject to review by the NIH Office of Biotechnology Activities' Recombinant DNA Advisory Committee, or the RAC. Although the FDA decides whether individual protocols may proceed, the RAC review process can impede the initiation of a clinical trial, even if the FDA has reviewed the study and it has become effective under an IND.

To date, neither we nor any other company has received regulatory approval to commence human clinical trials or to market therapeutics utilizing CRISPR/Cas9. The regulatory pathway for therapeutics such as those we are developing is unclear and the FDA and other regulatory authorities have not yet provided written guidance regarding preclinical or clinical studies or regulatory approval pathways for gene editing therapeutics.

In addition, if any product candidates encounter safety or efficacy problems, developmental delays, regulatory issues or other problems, our development plans and business could be significantly harmed. Further, competitors that are developing products with similar technology may experience problems with their product candidates or programs that could in turn cause us to identify problems with our product candidates and programs that would potentially harm our business.

Even if we obtain regulatory approval of any product candidates, such candidates may not gain market acceptance among physicians, patients, hospitals, third-party payors and others in the medical community.

The use of the CRISPR/Cas9 system as a framework for developing gene editing therapies is a recent development and may not become broadly accepted by physicians, patients, hospitals, third-party payors and others in the medical community. A variety of factors will influence whether our product candidates are accepted in the market, including, for example:

- the clinical indications for which our product candidates are approved;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or other regulatory authorities;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- the amount of upfront costs or training required for physicians to administer our product candidates;
- the availability of adequate coverage, reimbursement and pricing by third-party payors and government authorities;
- patients' ability to access physicians and medical centers capable of delivering any therapies that we develop;
- the willingness of patients to pay out of pocket in the absence of coverage and reimbursement by third-party payors and government authorities;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies;

- any restrictions on the use of our product candidates together with other medications;
- interactions of our product candidates with other medicines patients are taking;
- potential adverse events for any products developed, or negative interactions with regulatory agencies, by us or in others the gene therapy and gene editing fields; and
- the effectiveness of our sales and marketing efforts and distribution support.

Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete. In addition, adverse publicity due to the ethical and social controversies surrounding the therapeutic use of CRISPR/Cas9 or other therapeutics mediums such as viral vectors that we anticipate using in our clinical trials may limit market acceptance of our product candidates. If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, third-party payors or others in the medical community, we will not be able to generate significant revenue.

Negative public opinion and increased regulatory scrutiny of CRISPR/Cas9, gene editing or gene therapy generally may damage public perception of the safety of any product candidates that we develop and adversely affect our ability to conduct our business or obtain regulatory approvals for such product candidates.

Gene therapy in general, and gene editing in particular, remain novel technologies, with no gene therapy product approved to date in the United States and only one gene therapy product approved to date in the EU. Public perception may be influenced by claims that gene therapy or gene editing, including through the use of CRISPR/Cas9, is unsafe or unethical, and gene therapy or gene editing may not gain the acceptance of the public or the medical community. In particular, our success will depend upon physicians who specialize in the treatment of diseases targeted by our product candidates prescribing treatments that involve the use of our product candidates in lieu of, or in addition to, existing treatments with which they are more familiar and for which greater clinical data may be available. In addition, responses by the U.S., state or foreign governments to negative public perception or ethical concerns may result in new legislation or regulations that could limit our ability to develop or commercialize any product candidates, obtain or maintain regulatory approval or otherwise achieve profitability. More restrictive statutory regimes, government regulations or negative public opinion would have an adverse effect on our business, financial condition, results of operations and prospects and may delay or impair the development and commercialization of our product candidates or demand for any products we may develop. For example, earlier gene therapy trials led to several well-publicized adverse events, including cases of leukemia and death. Serious adverse events in our clinical trials, or other clinical trials involving gene therapy or gene editing products or our competitors' products, even if not ultimately attributable to the relevant product candidates, and the resulting publicity could result in increased government 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 candidate.

Coverage and reimbursement may be limited or unavailable in certain market segments for our product candidates, if approved, which could make it difficult for us to sell any product candidates or therapies profitably.

The success of our product candidates, if approved, depends on the availability of adequate coverage and reimbursement from third-party payors. In addition, because our product candidates represent new approaches to the treatment of genetic-based diseases, we cannot be sure that coverage and reimbursement will be available for, or accurately estimate the potential revenue from, our product candidates or assure that coverage and reimbursement will be available for any product that we may develop.

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors are critical to new product acceptance.

Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drugs and treatments they will cover and the amount of reimbursement. Coverage and reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. As a result, obtaining coverage and reimbursement approval of 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 for the use of our products on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. Even if we obtain coverage for a given product, the resulting reimbursement payment rates might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Additionally, third-party payors may not cover, or provide adequate reimbursement for, long-term follow-up evaluations required following the use of our gene-modifying products. Patients are unlikely to use our product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates. Because our product candidates may have a higher cost of goods than conventional therapies, and may require long-term follow up evaluations, the risk that coverage and reimbursement rates may be inadequate for us to achieve profitability may be greater. There is significant uncertainty related to insurance coverage and reimbursement of newly approved products. It is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our product candidates.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, cost containment initiatives and additional legislative changes.

We intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the EU, the pricing of biologics is subject to governmental control and other market regulations which could put pressure on the pricing and usage of our product candidates. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. In addition, market acceptance and sales of our product candidates will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for our product candidates and may be affected by existing and future health care reform measures.

Research and development of biopharmaceutical products is inherently risky. We may not be successful in our efforts to use and enhance our gene editing technology to create a pipeline of product candidates, obtain regulatory approval and develop commercially successful products, or we may expend our limited resources on programs that do not yield a successful product candidate and fail to capitalize on potential product candidates or diseases that may be more profitable or for which there is a greater likelihood of success. If we fail to develop product candidates, our commercial opportunity, if any, will be limited.

We do not currently have any product candidates. We are at an early stage of development and our technology and approach has not yet led, and may never lead, to any product candidate or any approved or

commercially successful products. Even if we are successful in building our pipeline of product candidates, completing clinical development, obtaining regulatory approvals and commercializing product candidates will require substantial additional funding beyond the net proceeds of this offering and are prone to the risks of failure inherent in therapeutic product development. Investment in biopharmaceutical product development involves significant risk that any potential product candidate will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval, or become commercially viable.

We cannot provide any assurance that we will be able to successfully advance any product candidates that we discover through the research process. Our research programs may initially show promise, yet fail to yield product candidates for clinical development or commercialization for many reasons, including the following:

- our technology and approach may not be successful in identifying product candidates;
- we may not be able or willing to assemble sufficient resources to acquire or discover product candidates;
- our product candidates may not succeed in preclinical or clinical testing;
- our planned risk mitigation strategy for selecting our sentinel indications may fail or we may not be able to efficiently apply learnings from our initial development programs to future development programs;
- we may be unable to optimize the therapeutic efficiency, specificity, or selectivity of our future products candidates;
- our therapeutic delivery systems may fail so that even a product candidate with therapeutic activity does not demonstrate a clinically meaningful therapeutic effect;
- a product candidate may not demonstrate in patients the biological, chemical and pharmacological properties identified in laboratory studies, or they may interact with human biological systems in unforeseen, ineffective or even harmful ways;
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- the therapeutic effect of a product candidate may not be permanent and may diminish over time;
- a single treatment course may not be sufficient for a cure or therapeutic benefit; it may take several treatment courses for the product to be effective;
- a well-defined and achievable pathway to regulatory approval may never materialize for a specific product candidate;
- competitors may develop alternatives that render our product candidates obsolete or less attractive;
- product candidates we develop may be covered by third-party or other exclusive rights or may not receive desired regulatory exclusivity, and we may be unable to protect our intellectual property rights;
- the market for a product candidate may change during our program so that the continued development of that product candidate is no longer reasonable;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all;
- we may be unable to successfully maintain existing collaborations or licensing arrangements or enter into new ones throughout the development process as appropriate; and
- a product candidate may not be accepted as safe and effective by physicians, patients, hospitals, third-party payors and others in the medical community.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, or we may not be able to identify, discover, develop or commercialize product candidates, which would have a material adverse effect on our business and could potentially cause us to cease operations.

Because we have limited financial and managerial resources, we focus on research programs that we identify as our sentinel indications. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other product candidates or other diseases that may later prove to have greater commercial potential, or relinquish valuable rights to such product candidates through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to retain sole development and commercialization rights. For additional information regarding the factors that will affect our ability to achieve revenue from product sales, see the risk factor entitled "-We have never generated any revenue from product sales and our ability to generate revenue from product sales and become profitable depends significantly on our success in a number of factors."

If we do not successfully develop and commercialize product candidates based upon our approach, we will not be able to obtain product revenue in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price. Further, our current exclusive focus on CRISPR/Cas9 technology for developing products as opposed to multiple, more proven technologies for product development increases the risk associated with our business. If we are not successful in developing a product candidate using CRISPR/Cas9 technology, we may not be able to successfully implement an alternative product development strategy.

Clinical development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any product candidates.

All of our lead programs are still in the discovery stage, and their risk of failure is high. It is impossible to predict when or if any of our programs will prove effective and safe in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of any of our future product candidates in humans. Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A clinical trial can fail at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

Successful completion of clinical trials is a prerequisite to submitting a biologics license application, or BLA, to the FDA, a Marketing Authorization Application, or MAA, to the European Medicines Agency, or EMA and similar approval filings to comparable foreign regulatory authorities, for each product candidate and, consequently, the ultimate approval and commercial marketing of any product candidates. We do not know whether any of our clinical trials will begin or be completed on schedule, if at all.

We may experience delays in completing our preclinical studies and initiating or completing clinical trials. We also may experience numerous unforeseen events during, or as a result of, any future clinical trials that we could conduct that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- regulators or institutional review boards, or IRBs, or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable terms with prospective trial sites and prospective contract research organizations, or CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trials of any product candidates may fail to show safety or efficacy, produce negative or inconclusive results and we may decide, or regulators may require us, to conduct additional preclinical studies or clinical trials or we may decide to abandon product development programs;

- the number of patients required for clinical trials of any product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials or fail to return for post-treatment follow-up at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all, or may deviate from the clinical trial protocol or drop out of the trial, which may require that we add new clinical trial sites or investigators;
- we may elect to, or regulators, IRBs or ethics committees may require that we or our investigators, suspend or terminate clinical research or trials for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of preclinical studies and clinical trials of any product candidates may be greater than we anticipate;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators, IRBs or ethics committees to suspend or terminate the trials, or reports may arise from preclinical or clinical testing of other gene therapies or gene editing based therapies that raise safety or efficacy concerns about our product candidates; and
- the FDA or other regulatory authorities may require us to submit additional data such as long-term toxicology studies, or impose other requirements before permitting us to initiate a clinical trial.

We could also encounter delays if a clinical trial is suspended or terminated by us, the IRBs of the institutions in which such trials are being conducted, the Data Safety Monitoring Board, or DSMB, for such trial or FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product or treatment, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. Further, the FDA or other regulatory authorities may disagree with our clinical trial design and our interpretation of data from clinical trials, or may change the requirements for approval even after they have reviewed and commented on the design for our clinical trials.

Our product development costs will increase if we experience delays in clinical testing or marketing approvals. We do not know whether any of our preclinical studies or clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant preclinical or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates and may allow our competitors to bring products to market before we do, potentially impairing our ability to successfully commercialize our product candidates and harming our business and results of operations. Any delays in our preclinical or future clinical development programs may harm our business, financial condition and prospects significantly.

Inconclusive results, lack of efficacy, adverse events or additional safety concerns in clinical trials that we or others conduct may impede the regulatory approval process or overall market acceptance of our future product candidates.

Therapeutic applications of gene editing technologies, and CRISPR/Cas9 in particular, are unproven and must undergo rigorous clinical trials and regulatory review before receiving marketing authorization. If the

results of our clinical studies or those of any other third parties, including with respect to gene editing technology, are inconclusive, fail to show efficacy or if such clinical trials give rise to safety concerns or adverse events, we may:

- be delayed in obtaining marketing approval for our future product candidates, if at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to the addition of labeling statements, such as warnings or contraindications, or other types of regulatory restrictions or scrutiny;
- be subject to changes in the way the product is administered;
- be required to perform additional clinical studies to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw their written guidance, if any, regarding the applicable regulatory approval pathway or any approval of the product in question, or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy, or REMS;
- be sued; or
- experience damage to our reputation.

Additionally, our future product candidates could potentially cause other adverse events that have not yet been predicted and the potentially permanent nature of gene editing effects, including CRISPR/Cas9's effects, on genes may make these adverse events irreversible. The inclusion of critically ill patients in our clinical studies or those of our competitors may result in deaths or other adverse medical events, including those due to other therapies or medications that such patients may be using. Any of these events could prevent us from achieving or maintaining regulatory approval or market acceptance of our future product candidates and impair our ability to achieve profitability.

We have never generated any revenue from product sales and our ability to generate revenue from product sales and become profitable depends significantly on our success in a number of factors.

We have no products approved for commercial sale, have not generated any revenue from product sales, and do not anticipate generating any revenue from product sales until some time after we have received regulatory approval for the commercial sale of a product candidate that we discover. Our ability to generate revenue and achieve and retain profitability depends significantly on our success in many factors, including:

- selecting commercially viable product candidates and effective delivery methods;
- completing research and nonclinical and clinical development of product candidates;
- obtaining regulatory approvals and marketing authorizations for product candidates for which we complete clinical trials;
- developing a sustainable and scalable manufacturing process for product candidates, including establishing and maintaining commercially viable supply relationships with third parties and potentially establishing our own manufacturing capabilities and infrastructure;
- launching and commercializing product candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor;
- obtaining market acceptance of our product candidates as viable treatment options;
- addressing any competing technological and market developments;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;

- maintaining good relationships with our collaborators and licensors;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- attracting, hiring and retaining qualified personnel.

Even if one or more product candidates that we discover and develop are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate and the timing of such costs may be out of our control. Our expenses could increase beyond expectations if we are required by the FDA or other regulatory agencies, domestic or foreign, to change our manufacturing processes or assays, or to perform clinical, nonclinical or other types of additional studies. If we are successful in obtaining regulatory approvals to market one or more product candidates, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to get reimbursement at any price and whether we own the commercial rights for that territory. If the number of our addressable disease patients is not as significant as we estimate, the indication approved by regulatory authorities is narrower than we expect or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such products, even if approved. If we are not able to generate revenue from the sale of any approved products, we may never become profitable.

We face significant competition in an environment of rapid technological change. The possibility that our competitors may achieve regulatory approval before we do or develop therapies that are more advanced or effective than ours may harm our business and financial condition or our ability to successfully market or commercialize our product candidates.

The biotechnology and pharmaceutical industries, including the gene editing field, are characterized by rapidly changing technologies, significant competition and a strong emphasis on intellectual property. We face substantial competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions.

Competitors in our efforts to provide genetic therapies to patients can be grouped into at least three sets based on their product discovery platforms:

- gene editing companies focused on CRISPR/Cas9 including: CRISPR Therapeutics, Inc., Editas Medicine, Inc. and Tracr Hematology Limited;
- other gene editing companies including: bluebird bio, Inc., Cellectis S.A., Poseida, Inc., Precision BioSciences, Inc. and Sangamo BioSciences; and
- gene therapy companies developing *ex vivo* therapies including: bluebird bio, Inc., Cellectis S.A., and Juno Therapeutics, Inc.

Our competitors will also include companies that are or will be developing small molecules, biologics and nucleic acid based therapies for the same indications that we are targeting with our CRISPR/Cas9-based therapeutics.

In addition, certain of our founders have had and may in the future have affiliations with other gene editing companies.

Any advances in gene therapy or gene editing technology made by a competitor may be used to develop therapies that could compete against any of our product candidates. Many of these competitors have substantially greater research and development capabilities and financial, scientific, technical, manufacturing, marketing, distribution and other resources than we do, and we may not be able to successfully compete with them.

To become and remain profitable, we must discover, 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 product candidates, obtaining marketing approval for product candidates, manufacturing, marketing and selling products that are approved and satisfying any post-marketing requirements. Even if we are successful in selecting and developing any product candidates, in order to compete successfully we may need to be first-to-market or demonstrate that our CRISPR/Cas9-based products are superior to therapies based on different treatment methods. If we are not first-to-market or are unable to demonstrate such superiority, any products for which we are able to obtain approval may not be successful. Furthermore in certain jurisdictions, if a competitor has orphan drug status for a product and if our product candidate is determined to be contained within the scope of a competitor's orphan drug exclusivity, then approval of our product for that indication or disease could potentially be blocked, for example, for up to seven years in the United States.

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 value of our company 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 value of our company also could cause you to lose all or part of your investment.

We have a very limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

We are very early in our development efforts and all of our lead programs are still in the discovery stage. We were formed in May 2014, have no products approved for commercial sale and have not generated any revenue from product sales. Our ability to generate product revenue or profits, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates, which may never occur. We may never be able to develop or commercialize a marketable product.

Each of our programs will require additional discovery research and then preclinical and clinical development, regulatory approval in multiple jurisdictions, obtaining manufacturing supply, capacity and expertise, building of a commercial organization, substantial investment and significant marketing efforts before we generate any revenue from product sales. In addition, our product candidates must be approved for marketing by the FDA or certain other foreign regulatory agencies, including the EMA, before we may commercialize any product.

Our limited operating history, particularly in light of the rapidly evolving gene editing field, may make it difficult to evaluate our current business and predict our future performance. Our very 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 frequently experienced by very early stage companies in rapidly evolving fields. If we do not address these risks successfully, our business will suffer.

We have incurred net losses in each period since our inception, anticipate that we will continue to incur net losses in the future and may never achieve profitability.

We are not profitable and have incurred losses in each period since our inception. For the period from May 7, 2014 (inception) to December 31, 2014, we reported a net loss of $9.5 million. For the six months ended June 30, 2015, we reported a net loss of $4.1 million. We expect these losses to increase as we continue to incur significant research and development and other expenses related to our ongoing operations, seek regulatory approvals for our future product candidates, scale-up manufacturing capabilities, maintain, expand and protect our intellectual property portfolio and hire additional personnel to support the development of our product candidates and to enhance our operational, financial and information management systems.

A critical aspect of our strategy is to invest significantly in our technology to improve the efficacy and safety of potential product candidates that we discover. Even if we succeed in discovering, developing and ultimately commercializing one or more of these product candidates, we will continue to incur losses for the

foreseeable future relating to our substantial research and development expenditures to develop our technologies. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital. Further, the net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period to period comparison of our results of operations may not be a good indication of our future performance.

We will need to raise substantial additional funding, even with the net proceeds expected from this offering. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of any product candidates.

Our operations have required substantial amounts of cash since inception. We expect to spend substantial amounts of our financial resources on our discovery programs going forward. If we are able to identity product candidates that are eventually approved, we will require significant additional amounts in order to launch and commercialize our product candidates. For the foreseeable future, we expect to continue to rely on additional financing to achieve our business objectives.

As of June 30, 2015, we had $19.8 million in cash. We estimate that our net proceeds from this offering will be approximately $ million, based on the initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus, after deducting the underwriting discounts and commissions, and estimated offering expenses payable by us. We expect to use the net proceeds from this offering to advance the research and development of our sentinel indications, to progress additional pipeline product candidates, further develop our delivery technologies and CRISPR/Cas9 gene editing platform and for working capital and other general corporate purposes. We believe that such proceeds, together with our existing cash and expected revenue under our collaboration with Novartis Institutes for BioMedical Research, Inc., or Novartis, will be sufficient to fund our operations for at least the next months. However, changing circumstances may cause us to increase our spending significantly faster than we currently anticipate, and we may need to spend more money than currently expected. In this regard, we will require additional capital for the further development and commercialization of any product candidates and may need to raise additional funds sooner if we choose to expand more rapidly than we presently anticipate or due to other unanticipated factors.

We cannot be certain that additional funding will be available on acceptable terms, or at all. We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Our collaboration and license agreements may also be terminated if we are unable to meet the payment or other obligations under the agreements. We could be required to seek collaborators for product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves.

Any of the above events could significantly harm our business, prospects, financial condition and results of operations 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, and restrict our operations.

Additional capital will be needed in the future to continue our planned operations. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest may be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity 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 or declaring dividends.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our ability to complete clinical trials or our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for any future product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. If patients are unwilling to participate in our clinical studies because of negative publicity from adverse events in the gene editing field, the novel nature of the CRISPR/Cas9 gene editing technology, the irreversibility of the effects of CRISPR/Cas9 or for other reasons, including competitive clinical studies for similar patient populations, then the timeline for recruiting patients, conducting studies and obtaining regulatory approval of potential products may be delayed. These delays could result in increased costs, delays in advancing our product development, delays in testing the effectiveness of our technology or termination of the clinical studies altogether. In addition, any patients who would otherwise be eligible for clinical trials that we may hold may instead enroll in clinical trials of product candidates of our competitors.

Patient enrollment is affected by other factors including:

- the size and nature of the patient population;
- the severity of the disease under investigation;
- the patient eligibility criteria for the study in question;
- the perceived risks and benefits of the product candidate under study;
- the design of the clinical trial;
- our payments for conducting clinical trials;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

Our inability to enroll a sufficient number of patients for clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in clinical trials may result in increased development costs for any of our potential future product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. Furthermore, we expect to rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and while we expect to enter into agreements governing their committed activities, we will have limited influence over their actual performance.

We expect to expand our development and regulatory capabilities, and as a result, we may encounter difficulties in hiring capable personnel and otherwise managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of product development, regulatory affairs and, if any product candidates receive marketing approval, sales, marketing and distribution. To manage our anticipated future growth, 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. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to recruit and train additional qualified personnel or to otherwise effectively manage the expansion of our operations. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business and development plans or disrupt our operations.

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

We are highly dependent on the research and development, clinical, legal and business development expertise of Nessan Bermingham, Ph.D., our President and Chief Executive Officer, John M. Leonard, M.D., our Chief Medical Officer and José E. Rivera, our Chief Operating Officer and Chief Legal Officer as well as the other principal members of our management, scientific and clinical teams. Although we have entered into employment arrangements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be important for our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products using our technology. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies, universities and research institutions for similar personnel. The market for qualified personnel in the biotechnology space generally, and gene editing and gene therapy fields in particular, in and around the Cambridge, Massachusetts area is especially competitive. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategies. Our consultants and advisors 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. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market products based on our technologies, we may not be successful in commercializing our products if and when any products candidates or therapies are approved and we may not be able to generate any revenue.

We do not currently have a sales or marketing infrastructure and, as a company, have no experience in the sale, marketing or distribution of therapeutic products. To achieve commercial success for any approved product candidate for which we retain sales and marketing responsibilities, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. In the future, we may choose to build a focused sales and marketing infrastructure to sell, or participate in sales activities with our collaborators for, some of our product candidates if and when they are approved.

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 any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This 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 product candidates on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future product candidates that we may develop;
- the lack of complementary treatments to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales, marketing and distribution services, 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 any of them 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. Further, our business, results of operations, financial condition and prospects will be materially adversely affected.

Our technological advancements and any potential for revenue may be derived in part from our collaboration with Novartis, and if this collaboration agreement were to be terminated, our business, financial condition, results of operations and prospects would be harmed.

In December 2014, we entered into a collaboration agreement with Novartis regarding the discovery of new CRISPR/Cas9-based therapies principally using chimeric antigen receptor T cells, or CAR T cells, and hematopoietic stem cells, or HSCs. Under the collaboration agreement, we received an upfront commitment to advance multiple programs. Pursuant to the agreement, we granted Novartis exclusive rights to further develop any products arising out of the CAR T cell program. Regarding HSCs, we plan to jointly advance multiple programs with Novartis and have agreed to a process for assigning development and ownership rights, which will enable us to develop our own proprietary HSC pipeline. Novartis may change its strategic focus or pursue alternative technologies in a manner that results in reduced, delayed or no revenue to us. Novartis has a variety of marketed products and product candidates under collaboration with other companies, including some of our competitors, and its own corporate objectives may not be consistent with our best interests. If Novartis fails to develop, obtain regulatory approval for or ultimately commercialize any product candidate from the CAR T cell and HSC programs in the applicable territories, or if Novartis terminates our collaboration, our business, financial condition, results of operations and prospects would be harmed. In addition, any dispute or litigation proceedings we may have with Novartis in the future could delay development programs, create uncertainty as to ownership of or access to intellectual property rights, distract management from other business activities and generate substantial expense.

Our existing and future collaborations will be important to our business. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.

We have limited capabilities for product development and do not yet have any capability for sales, marketing or distribution. Accordingly, we have entered, and plan to enter, into collaborations with other companies, including our therapeutic-focused collaboration agreement with Novartis, that we believe can provide such capabilities. This collaboration has provided us with important technologies and funding for our programs and technology and we expect to receive additional technologies and funding under this and other collaborations in the future. Our existing therapeutic collaboration, and any future collaborations we enter into, may pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs or license arrangements based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as a strategic transaction that may divert resources or create 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 a new formulation of a product candidate for clinical testing;

- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products and product candidates if the collaborators believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- collaborators may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution or marketing of a product candidate or product;
- collaborators with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or terminations of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- if a collaborator of ours is involved in a business combination, the collaborator might deemphasize or terminate the development or commercialization of any product candidate licensed to it by us; and
- collaborations may be terminated by the collaborator, and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

If our therapeutic collaborations do not result in the successful discovery, development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our technology and product candidates could be delayed and we may need additional resources to develop product candidates and our technology. All of the risks relating to product development, regulatory approval and commercialization described in this prospectus also apply to the activities of our therapeutic collaborators.

Additionally, if one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our perception in the business and financial communities could be adversely affected.

For some of our programs, we may in the future determine to collaborate with pharmaceutical and biotechnology companies for development and potential commercialization of therapeutic products. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator’s resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator’s evaluation of a number of factors. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, 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 fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates, bring them to market or continue to develop our technology and our business may be materially and adversely affected.

Gene editing products are novel and may be complex and difficult to manufacture. We could experience manufacturing problems that result in delays in the development or commercialization of our product candidates or otherwise harm our business.

The manufacturing process used to produce CRISPR/Cas9-based product candidates may be complex, as they are novel and have not been validated for clinical and commercial production. Several factors could cause production interruptions, including equipment malfunctions, facility contamination, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of our suppliers.

Our product candidates will require processing steps that are more complex than those required for most small molecule drugs. Moreover, unlike small molecules, the physical and chemical properties of a biologic such as ours generally cannot be fully characterized. As a result, assays of the finished product may not be sufficient to ensure that the product will perform in the intended manner. Accordingly, we will employ multiple steps to control the manufacturing process to assure that the process works and the product candidate is made strictly and consistently in compliance with the process. Problems with the 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, EMA or other applicable standards or specifications with consistent and acceptable production yields and costs.

In addition, the FDA, the EMA and other foreign 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, the EMA or other foreign 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. Lot failures or product recalls could cause us to delay product launches or clinical trials, which could be costly to us and otherwise harm our business, financial condition, results of operations and prospects. Problems in our manufacturing process could restrict our ability to meet market demand for our products.

We also may encounter problems hiring and retaining the experienced scientific, quality-control and manufacturing personnel needed to operate our manufacturing processes, which could result in delays in production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our manufacturing process or facilities could make us a less attractive collaborator for potential partners, including larger pharmaceutical companies and academic research institutions, which could limit our access to additional attractive development programs.

We expect to rely on third parties to manufacture our clinical product supplies, and we intend to rely on third parties for at least a portion of the manufacturing process of our product candidates, if approved. Our business could be harmed if the third parties fail to provide us with sufficient quantities of product inputs or fail to do so at acceptable quality levels or prices.

We do not currently own any facility that may be used as our clinical-scale manufacturing and processing facility and must eventually rely on outside vendors to manufacture supplies and process our product candidates. We have not yet caused any product candidates to be manufactured or processed on a commercial scale and may

not be able to do so for any of our product candidates. We will make changes as we work to optimize the manufacturing process, and we cannot be sure that even minor changes in the process will result in therapies that are safe and effective.

The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA or other foreign regulatory agencies pursuant to inspections that will be conducted after we submit an application to the FDA or other foreign regulatory agencies. We do not control the manufacturing process of, and will be completely dependent on, our contract manufacturing partners for compliance with regulatory requirements, known as good manufacturing practice, or cGMP, requirements for manufacture of our product candidates. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or other regulatory authorities, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

We will 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 or comply with regulatory requirements, we may not be able to obtain regulatory approval of or commercialize any potential product candidates.

We will depend upon third parties, including independent investigators, to conduct our clinical trials under agreements with universities, medical institutions, CROs, strategic partners and others. We expect to have to negotiate budgets and contracts with CROs and trial sites, which may result in delays to our development timelines and increased costs.

We will rely heavily on third parties over the course of our clinical trials, and, as a result, will have limited control over the clinical investigators and limited visibility into their day-to-day activities, including with respect to their compliance with the approved clinical protocol. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with good clinical practice, or GCP, requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, clinical investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to suspend or terminate these trials or perform additional preclinical studies or clinical trials before approving our marketing applications. We cannot be certain that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the GCP requirements. In addition, our clinical trials must be conducted with biologic product produced under current good manufacturing practice, or cGMP, requirements and may require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Any third parties conducting our future clinical trials will not be our employees and, except for remedies that may be available to us under our agreements with such third parties, we cannot control whether or not 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 trials or other product 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 they need to be replaced or 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 for other reasons, our clinical trials may be extended, delayed or terminated and 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 these third-party CROs or others terminate, we may not be able to enter into arrangements with alternative CROs or other third parties or to do so on commercially reasonable terms. Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO begins work. As a result, delays may occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

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. For example, recent global financial crises caused extreme volatility and disruptions in the capital and credit 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 products, 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, possibly resulting in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Our internal computer systems, or those of our collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Our internal computer systems and those of our current and any future collaborators and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While 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 development programs 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 completed 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 a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our competitive position could be harmed and the further development and commercialization of our product candidates could be delayed.

Risks Related to Government Regulation

The regulatory approval process for our potential product candidates in the United States, EU and other jurisdictions is currently uncertain and will be lengthy, time-consuming and inherently unpredictable and we may experience significant delays in the clinical development and regulatory approval, if any, of our product candidates.

The research, testing, manufacturing, labeling, approval, selling, import, export, marketing and distribution of drug products, including biologics, are subject to extensive regulation by the FDA in the United States and other regulatory authorities. We are not permitted to market any biological product in the United States until we receive a biologics license from the FDA. We have not previously submitted a BLA to the FDA, or similar approval filings to comparable foreign authorities. A BLA must include extensive preclinical and clinical data and supporting

information to establish that the product candidate is safe, pure and potent for each desired indication. The BLA must also include significant information regarding the chemistry, manufacturing and controls for the product, and the manufacturing facilities must complete a successful pre-license inspection. We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has no experience with commercial development of CRISPR/Cas9-based therapies for human therapeutic use. 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 to support approval. The opinion of the Advisory Committee, although not binding, may have a significant impact on our ability to obtain approval of any product candidates that we develop based on the completed clinical trials. Accordingly, the regulatory approval pathway for such product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained.

In addition, clinical trials can be delayed or terminated for a variety of reasons, including delays or failures related to:

- obtaining regulatory authorization to begin a trial, if applicable;
- the availability of financial resources to begin and complete the planned trials;
- 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 trial sites;
- obtaining approval at each clinical trial site by an independent IRB;
- recruiting suitable patients to participate in a trial in a timely manner;
- having patients complete a trial or return for post-treatment follow-up;
- clinical trial sites deviating from trial protocol, not complying with GCP requirements or dropping out of a trial;
- addressing any patient safety concerns that arise during the course of a trial;
- addressing any conflicts with new or existing laws or regulations;
- adding new clinical trial sites; or
- manufacturing qualified materials under cGMP regulations for use in clinical trials.

Patient enrollment is a significant factor in the timing of clinical trials and is affected by many factors. Further, a clinical trial may be suspended or terminated by us, the IRBs for the institutions in which such trials are being conducted, the DSMB for such trial or the FDA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If we experience termination of, or delays in the completion of, any clinical trial of product candidates, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenue will be delayed. In addition, any delays in completing any clinical trials will increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenue.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, but a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and sale of the

product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical studies or clinical trials as clinical studies conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we are allowed to charge for our products is also subject to approval.

Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets or to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Even if we receive regulatory approval of any product candidates or therapies, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities. In addition, we will be subject to continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-approval.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA, and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP, and in certain cases, current Good Tissue Practices, or cGTP, regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any BLA, other marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials and surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS program as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, we will have to comply with requirements including submissions of safety and other post-marketing information and reports and registration.

The FDA may impose consent decrees or withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or 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-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our products, withdrawal of the product from the market or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;

- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals;
- product seizure or detention or refusal to permit the import or export of our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising, and promotion of products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses and a company that is found to have improperly promoted off-label uses may be subject to significant liability. The policies of the FDA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow 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 and we may not achieve or sustain profitability.

Healthcare cost control initiatives, including healthcare legislative reform measures, may have a material adverse effect on our business and results of operations.

Third-party payors, whether domestic or foreign, or 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 the health care system that could impact our ability to sell our products profitably. In particular, there have been and continue to be a number of legislative initiatives at the United States federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively the Affordable Care Act, was enacted, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical and biotechnology industry. The Affordable Care Act, among other things, subjects biologic products to potential competition by lower-cost biosimilars, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increases the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, extends the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjects manufacturers to new annual fees and taxes for certain branded prescription drugs and biologic agents and provides incentives to programs that increase the federal government’s comparative effectiveness research. At this time, the full effect that the Affordable Care Act would have on our business remains unclear.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation’s automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013, and will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012, was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals and other treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare, Medicaid and other healthcare funding, which could have a material adverse effect on our customers and, accordingly, our financial operations.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of

healthcare. We cannot predict the initiatives that may be adopted in the future, any of which could limit the amounts that foreign, federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

The continuing efforts of governments, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls could harm our business, financial conditions and prospects and may adversely affect:

- the demand for or utilization of our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes, fees and rebates that we are required to pay; and
- the availability of capital.

Any denial in coverage or reduction in reimbursement from Medicare or other government programs may result in a similar denial or reduction in payments from private payors, which may adversely affect our future profitability.

Our employees, independent contractors, clinical investigators, CROs, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, clinical investigators, CROs, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to: comply with federal and state laws and those of other applicable jurisdictions; provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies; comply with manufacturing standards; comply with federal and state data privacy, security, fraud and abuse and other healthcare laws and regulations in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with clinical investigators and research patients, as well as proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare products and services, as well as certain 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 may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, including off-label uses of our products, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental 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 or government 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, including the imposition of significant fines or other sanctions.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, physician payment transparency laws and health information privacy and security laws. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

If we obtain FDA approval for any of our product candidates and begin commercializing those products in the United States, our operations may be directly, or indirectly through our customers and third-party payors, subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician sunshine laws and regulations. These laws may impact, among other things, our proposed sales, marketing, and education programs and our relationships with healthcare providers, physicians and other parties through which we market, sell and distribute our products for which we obtain marketing approval. In addition, we may be subject to patient privacy regulation by the federal government and the states in the United States as well as other jurisdictions. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), 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 or recommendation of 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;
- federal civil and criminal false claims laws and civil monetary penalties laws, including the civil False Claims Act, which impose criminal and civil penalties, through civil whistleblower or *qui tam* actions, on individuals or entities for, among other things, knowingly presenting, or causing to be presented to the U.S. federal government, claims for payment or approval that are false or fraudulent or knowingly making a false 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 U.S. federal Anti-Kickback Statute constitutes a false of fraudulent claim for purposes of the False Claims Act;
- 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 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. Similar to the 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 their respective implementing regulations, which impose 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;
- the U.S. federal physician payment transparency requirements, sometimes referred to as the “Physician Payments Sunshine Act,” created under the Affordable Care Act, and their implementing regulations, which require manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program to report annually to the Centers for Medicare and Medicaid Services, information related to payments or other transfers of value made to physicians, other healthcare providers, and teaching hospitals, as well as ownership and investment interests held by physicians, other healthcare providers, and their immediate family members; and

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

Additionally, we are subject to state and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply regardless of the payor.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the Affordable Care Act, among other things, amends the intent requirement of the federal Anti-Kickback Statute and criminal healthcare fraud statutes. As a result of such amendment, a person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them in order to have committed a violation. Moreover, the Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. 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, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other U.S. federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

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.

We will become subject to numerous 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 will involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also may produce hazardous waste products. We generally anticipate contracting 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, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

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 research, development or production efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Risks Related to Our Intellectual Property

Third-party claims of intellectual property infringement against us, our licensors or our collaborators may prevent or delay our product discovery and development efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, as well as administrative proceedings for challenging patents, including interference, derivation, and reexamination proceedings before the United States Patent and Trademark Office, or USPTO, or oppositions and other comparable proceedings in foreign jurisdictions, involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, and we expect this to be true for the CRISPR/Cas9 space as well. Recently, due to changes in U.S. law referred to as patent reform, new procedures including *inter partes* review and post-grant review have been implemented. This reform adds uncertainty to the possibility of challenge to our developed or licensed patents in the future.

Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we are developing our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others. We cannot guarantee that our technology, future product candidates or the use of such product candidates do not infringe third-party patents. It is also possible that we have failed to identify relevant third-party patents or applications.

Third parties may assert that we infringe their patents or that we are otherwise employing their proprietary technology without authorization, and may sue us. These third parties could include the co-owners of patents that we license and from whom we have not yet obtained consent to practice the intellectual property in countries outside the United States, such as the co-owners of the intellectual property owned by the Regents of the University of California and the University of Vienna, which we refer to collectively as UC/Vienna, and Dr. Emmanuelle Charpentier from whom we do not yet have a license. There may be third-party patents of which we are currently unaware with claims to compositions, formulations, methods of manufacture or methods of use or treatment that cover product candidates we discover and develop. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies or the manufacture, use or sale of our product candidates infringes upon these patents. If any such third-party patents were held by a court of competent jurisdiction to cover our technologies or product candidates, the holders of any such patents may be able to block our ability to commercialize the applicable product candidate unless we obtain a license under the applicable patents, or until such patents expire or are finally determined to be held invalid or unenforceable. Such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Third parties asserting their patent rights against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. For example, the Broad Institute, Inc., or the Broad Institute, and the Massachusetts Institute of Technology, or MIT, own a patent portfolio that include issued patents in the U.S. and Europe, that purport to cover certain aspects of the CRISPR/Cas9 gene editing platform for use on eukaryotic target sequences. If an interference proceeding is declared between the Broad Institute patent family and the UC/Vienna and Dr. Charpentier patent family we license through Caribou, the USPTO will determine whether the contested inventions belong either to UC/Vienna and Dr. Charpentier or to the Broad Institute. While we expect these patents to be subject to an interference, it is possible that these patents owned by the Broad Institute will be upheld by the USPTO and could be asserted against us during development or commercialization of one of our CRISPR/Cas9-based products. Defense of these claims, regardless of their merit, would involve substantial litigation expense, would be a substantial diversion of management and other employee resources from our business and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties

or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates, force us to redesign our infringing products or force us to cease some or all of our business operations, any of which could materially harm our business and, with respect to the matter involving the Broad Institute and MIT mentioned above, could prevent us from further developing and commercializing our proposed future product candidates thereby causing us significant harm. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

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, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor or other claims challenging the inventorship of our patents or ownership of our intellectual property (including patents and intellectual property that we in-license). For example, the University of California, Berkeley, patent family that is covered by our license agreement with Caribou is co-owned by UC/Vienna and Dr. Charpentier, and our sublicense rights are derived from the first two co-owners and not from Dr. Charpentier. Therefore, our rights to these patents are not exclusive and third parties, including competitors, may have access to intellectual property which is important to our business. Further, in jurisdictions outside the United States, a license may not be enforceable unless all the owners of the intellectual property agree or consent to the license. Accordingly, the owner(s) of Dr. Charpentier's interests in the intellectual property co-owned by UC/Vienna and Dr. Charpentier that we license through Caribou could seek monetary or equitable relief requiring us to pay them compensation for, or refrain from, exploiting these patents. In addition, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others, including Caribou and Novartis. Any termination of these licenses, or a finding that they lack legal effect, could result in the loss of significant rights and could harm our ability to commercialize any product candidates. See the section entitled "Business—Intellectual Property" for additional information regarding our license agreements.

Disputes may also arise between us and our licensors, our licensors and their licensors, or us and third parties that co-own intellectual property with our licensors or their licensors, regarding intellectual property subject to a license agreement, including those relating to:

- the scope of rights, if any, granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the license agreement;

- whether our licensor or its licensor had the right to grant the license agreement;
- whether third parties are entitled to compensation or equitable relief, such as an injunction, for our use of the intellectual property without their authorization;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- whether we are complying with our obligations with respect to the use of the licensed technology in relation to our development and commercialization of product candidates;
- our involvement in the prosecution of the licensed patents and our licensors' overall patent enforcement strategy;
- the allocation of ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and by us and our partners; and
- the amounts of royalties, milestones or other payments due under the license agreement.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, or are insufficient to provide us the necessary rights to use the intellectual property, we may be unable to successfully develop and commercialize the affected product candidates. If we or any such licensors fail to adequately protect this intellectual property, our ability to commercialize our products could suffer.

We depend, in part, on our licensors to file, prosecute, maintain, defend and enforce patents and patent applications that are material to our business.

Patents relating to our product candidates are controlled by certain of our licensors. Each of our licensors or their licensors generally has rights to file, prosecute, maintain and defend the patents we have licensed from such licensor. If these licensors or any future licensees and in some cases, co-owners from which we do not yet have licenses, having rights to file, prosecute, maintain, and defend our patent rights fail to conduct these activities for patents or patent applications covering any of our product candidates, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using or selling competing products. We cannot be certain that such activities by our licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. Pursuant to the terms of the license agreements with our licensors, the licensors may have the right to control enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents and, even if we are permitted to pursue such enforcement or defense, we cannot ensure the cooperation of our licensors or, in some cases, other necessary parties, such as the co-owners of the intellectual property from which we have not yet obtained a license. We cannot be certain that our licensors, and in some cases, their co-owners, will allocate sufficient resources or prioritize their or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent us from continuing to license intellectual property that we may need to operate our business. In addition, even when we have the right to control patent prosecution of licensed patents and patent applications, enforcement of licensed patents, or defense of claims asserting the invalidity of those patents, we may still be adversely affected or prejudiced by actions or inactions of our licensors and their counsel that took place prior to or after our assuming control.

We may not be successful in obtaining or maintaining necessary rights to product components and processes for our product development pipeline.

The growth of our business will likely depend in part on our ability to acquire or in-license additional proprietary rights. For example, our programs may involve additional product candidates or delivery systems that may require the use of additional proprietary rights held by third parties. Our ultimate product candidates may also require specific formulations to work effectively and efficiently. These formulations may be covered by intellectual property rights held by others. We may be unable to acquire or in-license any relevant third-party intellectual property rights that we identify as necessary or important to our business operations.

Additionally, we sometimes collaborate with academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program. If we are unable to successfully obtain rights to required third-party intellectual property or to maintain the existing intellectual property rights we have, we may have to abandon development of such program and our business and financial condition could suffer.

The licensing and acquisition of third-party intellectual property rights is a competitive practice 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 commercialize our product candidates. More established companies may have a competitive advantage over us due to their larger size and cash resources or greater clinical development and commercialization capabilities. 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 that we may seek to acquire.

We could be unsuccessful in obtaining or maintaining adequate patent protection for one or more of our products or product candidates.

We anticipate that we will file additional patent applications both in the United States and in other countries, as appropriate. However, we cannot predict:

- if and when any patents will issue;
- the degree and range of protection any issued patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- whether others will apply for or obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings to defend our patent rights, which may be costly whether we win or lose.

Composition of matter patents for biological and pharmaceutical products are generally considered to be the strongest form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain, however, that any claims in our pending or future patent applications covering the composition of matter of our product candidates will be considered patentable by the USPTO or by patent offices in foreign countries, or that the claims in any of our ultimately issued patents will be considered valid and enforceable by courts in the United States or foreign countries. Method of use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products "off-label" for those uses that are covered by our method of use patents. Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement is difficult to prevent or prosecute.

The strength of patents in the biotechnology and pharmaceutical field can be uncertain, and evaluating the scope of such patents involves complex legal and scientific analyses. The patent applications that we own or in-license may fail to result in issued patents with claims that cover any product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability, or scope thereof, which may result in such patents being narrowed, invalidated, or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by the patent applications we hold is threatened, this could dissuade companies from collaborating with us to develop, and could threaten our ability to

commercialize, product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market product candidates under patent protection would be reduced. Because patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for U.S. applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. For U.S. applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law in view of the passage of the America Invents Act, which brought into effect significant changes to the U.S. patent laws, including new procedures for challenging pending patent applications and issued patents.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost, 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 output before it is too late to obtain patent protection. Moreover, in some circumstances, we do not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. We may also require the cooperation of our licensors or other necessary parties, such as the co-owners of the intellectual property from which we have not yet obtained a license, in order to enforce the licensed patent rights, and such cooperation may not be provided. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The laws of foreign countries may not protect our rights to the same extent as the laws of the United States and we may fail to seek or obtain patent protection in all major markets. For example, European patent law restricts the patentability of methods of treatment of the human body more than United States law does. 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. Therefore, we will be unable to know with certainty whether we were the first to make any inventions claimed in any patents or patent applications, or that we were the first to file for patent protection of such inventions, nor can we know whether those from whom we license patents were the first to make the inventions claimed or were the first to file.

As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications or the patent applications that we obtain rights to through in-licensing arrangements may not result in patents being issued which protect our technology or future product candidates, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent.

We also utilize processes for which patents are difficult to enforce. In addition, other elements of our product discovery and development processes involve proprietary know-how, information, or technology that is not covered by patents. Trade secrets, however, may be difficult to protect. We seek to protect our proprietary processes, in part, by entering into confidentiality agreements with our employees, consultants, outside scientific advisors, contractors, and collaborators. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, outside scientific advisors, contractors, and collaborators might intentionally or inadvertently disclose our trade secret information to competitors. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. 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 market, which could materially adversely affect our business, operating results, and financial condition.

We have limited foreign intellectual property rights and may not be able to protect our intellectual property rights throughout the world.

We have limited intellectual property rights outside the United States. Filing, prosecuting, maintaining and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can have a different scope and strength than do those in the United States. In addition, the laws of some foreign countries, such as China, Brazil, Russia, India, and South Africa, do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and 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 further, may export otherwise infringing products to territories where we have patent protection, but enforcement rights are not as strong as those in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or adequate to prevent them from competing. Further, in jurisdictions outside the United States, a license may not be enforceable unless all the owners of the intellectual property agree or consent to the license.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, such as China, Brazil, Russia, India, and South Africa, do not favor the enforcement of patents, trade secrets and other intellectual property, particularly those relating to biopharmaceutical products, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other intellectual property rights, or the marketing of competing products in violation of our proprietary rights. Proceedings to enforce our patent and other intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Furthermore such proceedings could put our patents at risk of being invalidated, held unenforceable, or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims of infringement or misappropriation against us. We may not prevail in any lawsuits that we initiate 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 from the intellectual property that we develop or license.

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

Competitors may infringe our patents or the patents of our licensors. To cease such infringement or unauthorized use, we may be required to file patent infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding or a declaratory judgment action against us, 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 proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly and could put our patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

Interference or derivation proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to, or the correct inventorship of, our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation, interference or derivation proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or before the USPTO or comparable foreign authority.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate 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. Third parties may also raise similar claims before administrative bodies in the United States or other jurisdictions, even outside the context of litigation. Such mechanisms include re-examination, *inter partes* review, post-grant review and equivalent proceedings in foreign jurisdictions, such as opposition or derivation proceedings. Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity, unpatentability and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection could have a material adverse impact on our business.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies as well as academic research institutions. We may be subject to claims that we or our employees, consultants, or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. Although an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents. In any such event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

We may be required to pay certain milestones and royalties under our license agreements with third-party licensors.

Under our current and future license agreements, we may be required to pay milestones and royalties based on our revenues from sales of our products utilizing the technologies licensed or sublicensed from Caribou and Novartis and these royalty payments could adversely affect the overall profitability for us of any products that we may seek to commercialize. In order to maintain our license rights under these license agreements, we will need to meet certain specified milestones, subject to certain cure provisions, in the development of our product candidates and in the raising of funding. In addition, these agreements contain diligence milestones and we may not be successful in meeting all of the milestones in the future on a timely basis or at all. We will need to outsource and rely on third parties for many aspects of the clinical development, sales and marketing of our products covered under our license agreements. Delay or failure by these third parties could adversely affect the continuation of our license agreements with their third-party licensors.

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

Risks Related to Our Common Stock and this Offering

We expect that our stock price will fluctuate significantly and investors may not be able to resell their shares at or above the initial public offering price.

The trading price of our common stock following this offering may be highly volatile and could be subject to wide fluctuations in response to various factors, many of which are beyond our control. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including those discussed in this "Risk Factors" section and elsewhere in this prospectus and the following:

- the results of our efforts to discover, develop, acquire or in-license product candidates;
- success of competitive products or technologies;
- results or delays in clinical trials or changes in the development status of our future product candidates;
- any delay in our regulatory filings for any product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings;
- regulatory or legal developments in the United States and other countries, especially changes in laws or regulations applicable to our products, including clinical trial requirements for approvals;
- our inability to obtain or delays in obtaining adequate product supply for any approved product or inability to do so at acceptable prices;
- any failure to commercialize any product candidates or if the size and growth of the markets we intend to target fail to meet expectations;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to CRISPR/Cas9-based therapy or the use of our and competitors' product candidates;
- introductions or announcements of new products offered by us or significant acquisitions, strategic partnerships, joint ventures or capital commitments by us, our collaborators or our competitors and the timing of such introductions or announcements;
- our ability to effectively manage our growth;
- our ability to successfully treat additional types of genetic-based diseases;
- changes in the structure of healthcare payment systems;
- actual or anticipated changes in estimates to or projections of financial results, development timelines or recommendations by securities analysts;
- publication of research reports about us or our industry, or gene editing in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- market conditions in the pharmaceutical and biotechnology sectors or the economy generally;
- our ability or inability to raise additional capital through the issuance of equity or debt or collaboration arrangements and the terms on which we raise it;
- trading volume of our common stock;
- disputes or other developments relating to proprietary rights, including patents, litigation or interference matters and our ability to obtain patent protection for our technologies;

- significant lawsuits, including patent or stockholder litigation; and
- general economic, industry and market conditions.

The stock market in general, and market prices for the securities of biopharmaceutical companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock and an active trading market for our shares may never develop or be sustained following this offering. The initial price to the public for our common stock was determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of the common stock after the offering. The lack of an active market may impair investors' ability to sell their shares at the time they wish to sell them or at a price that they consider reasonable, may reduce the market value of their shares and may impair our ability to raise capital.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by securities and industry analysts. If no or few securities or industry analysts commence coverage of us, or one or more of the analysts who cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases research coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Future sales of our common stock in the public market could cause our stock price to fall.

Our stock price could decline as a result of sales of a large number of shares of our common stock after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Upon completion of this offering, shares of our common stock will be outstanding (or shares of common stock will be outstanding assuming exercise in full of the underwriters' option to purchase additional shares), based on our shares outstanding as of , 2015, including shares of restricted stock that have been awarded to certain of our employees and consultants. All shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or Securities Act, unless held by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The resale of the remaining shares, or % of our outstanding shares after this offering, is currently prohibited or otherwise restricted as a result of securities law provisions, market standoff agreements entered into by our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters. However, subject to applicable securities law restrictions and excluding shares of restricted stock that will remain unvested, these shares will be able to be sold in the public market beginning 180 days after the date of this prospectus. Shares of unvested restricted stock that were issued and outstanding as of , 2015 will become available for sale immediately upon the vesting of such shares, as applicable, and the expiration of any applicable market stand-off or lock-up agreements. Shares issued upon the exercise of stock options pursuant to future awards that may be granted under our equity incentive plans or pursuant to future awards granted under

those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market stand-off and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act. For more information see the section entitled “Shares Eligible for Future Sale” appearing elsewhere in this prospectus.

Upon completion of this offering, the holders of approximately shares, or %, of our common stock, will have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register the offer and sale of all shares of common stock that we may issue under our equity compensation plans. Once we register the offer and sale of shares for the holders of registration rights and shares to be issued under our equity incentive plans, they can be freely sold in the public market upon issuance, subject to the lock-up agreements described in the section entitled “Underwriting” appearing elsewhere in this prospectus.

In addition, in the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

Our principal stockholders and management own a significant percentage of our stock and, if they choose to act together, will be able to control or exercise significant influence over matters subject to stockholder approval.

Our executive officers, directors and principal stockholders, together with their respective affiliates, beneficially owned approximately 83.2% of our capital stock as of August 31, 2015. Upon completion of this offering, that same group will beneficially own % of our capital stock, of which % will be beneficially owned by our executive officers (assuming no exercise of the underwriters’ option to purchase additional shares). Accordingly, after this offering, our executive officers, directors and principal stockholders, if they choose to act together, will be able to determine the composition of the board of directors, retain the voting power to approve all matters requiring stockholder approval, including mergers and other business combinations, and continue to have significant influence over our operations. This concentration of ownership could have the effect of delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us that you may believe are in your best interests as one of our stockholders. This in turn could have a material adverse effect on our stock price and may prevent attempts by our stockholders to replace or remove the board of directors or management.

If you purchase shares of common stock in this offering, you will suffer immediate dilution of your investment.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. To the extent shares subsequently are issued under outstanding options or warrants, you will incur further dilution. Based on the initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of $ per share, representing the difference between our pro forma as adjusted net tangible book value per share, which gives effect to this offering, and the initial public offering price. In addition, purchasers of common stock in this offering will have contributed approximately % of the aggregate price paid by all purchasers of our stock but will own only approximately % of our common stock outstanding after this offering.

Our management team has broad discretion to use the net proceeds from this offering and its investment of these proceeds may not yield a favorable return. They may invest the proceeds of this offering in ways with which investors disagree.

We expect to use the net proceeds from this offering to advance the research and development of our sentinel indications, to progress additional therapeutic candidates and for working capital and other general

corporate purposes. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. However, within the scope of our plan, and in light of the various risks to our business that are set forth in this section, our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return, if at all. If we do not invest or apply the proceeds of this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause our stock price to decline.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us difficult, limit attempts by our stockholders to replace or remove our current management and adversely affect our stock price.

Provisions of our certificate of incorporation and bylaws to be effective upon consummation of this offering may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our stock. Among other things, the certificate of incorporation and bylaws will:

- permit the board of directors to issue up to shares of preferred stock, with any rights, preferences and privileges as they may designate;
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide the board of directors into three classes;
- provide that a director may only be removed from the board of directors by the stockholders for cause;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders, and may not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and meet specific requirements as to the form and content of a stockholder's notice;
- prevent cumulative voting rights (therefore allowing the holders of a plurality of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- require that, to the fullest extent permitted by law, a stockholder reimburse us for all fees, costs and expenses incurred by us in connection with a proceeding initiated by such stockholder in which such stockholder does not obtain a judgment on the merits that substantially achieves the full remedy sought;
- provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officer (or president, in the absence of a chief executive officer) or by the board of directors; and
- provide that stockholders will be permitted to amend the bylaws only upon receiving at least two-thirds of the total votes entitled to be cast by holders of all outstanding shares then entitled to vote generally in the election of directors, voting together as a single class.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any "interested" stockholder for a period of three years following the date on which the stockholder became an "interested" stockholder.

Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum 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, officers or employees.

Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware is the exclusive forum for 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 pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws, any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of 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, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition.

We will incur increased costs as a result of operating as a public company.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting requirements. We also anticipate that we will incur costs associated with relatively recently adopted corporate governance requirements, including requirements of the Securities and Exchange Commission, or SEC, and the NASDAQ Global Market. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We also expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer 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. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as executive officers. We are currently evaluating and monitoring developments with respect to these rules, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

We are an emerging growth company, and, for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to "emerging growth companies." We could remain an "emerging growth company" for up to five years, or until the earliest of (1) the last day of the first fiscal year in which our annual gross revenue exceeds $1 billion, (2) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, which would occur if the market value of our common stock that is held by non-affiliates exceeds $700 million as of the last business day of our most recently completed second fiscal quarter or (3) the date on which we have issued more than $1 billion in non-convertible debt during the preceding three-year period. So long as we remain an "emerging growth company," we expect to avail ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” contains express or implied forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- the initiation, timing, progress and results of our research and development programs and future preclinical and clinical studies;
- our ability to apply a risk-mitigated strategy to efficiently discover and develop product candidates, including by applying learnings from one program to other programs;
- our ability to create a pipeline of product candidates;
- our ability to advance any product candidates into, and successfully complete, clinical studies;
- our ability to advance our therapeutic delivery capabilities;
- the issuance of regulatory guidance regarding preclinical and clinical studies for gene editing products;
- the timing or likelihood of regulatory filings and approvals;
- the commercialization of our product candidates, if approved;
- the pricing and reimbursement of our product candidates, if approved;
- the implementation of our business model, strategic plans for our business, product candidates and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- estimates of our expenses, future revenues, capital requirements and our needs for additional financing;
- the potential benefits of strategic collaboration agreements and our ability to enter into strategic arrangements;
- our ability to maintain and establish collaborations or obtain additional grant funding;
- our financial performance;
- developments relating to our competitors and our industry; and
- other risks and uncertainties, including those listed under the caption “Risk Factors.”

In some cases, forward-looking statements can be identified by terminology such as “may,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “continue” or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the section entitled “Risk Factors” and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we

reference in this prospectus and have filed with the Securities and Exchange Commission as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of shares of our common stock in this offering will be approximately $ million, or $ million if the underwriters exercise in full their option to purchase additional shares, assuming an initial public offering price of $ per share, 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.

A $1.00 increase (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 (decrease) the net proceeds to us from this offering by $ million, assuming 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 payable by us. A 1.0 million share increase (decrease) in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) our net proceeds from this offering by $ million, assuming no change in the assumed initial public offering price per share and 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 as follows:

- $ million to advance the research and development of our product candidates for our sentinel indications through to the submission of at least one IND;
- $ million to progress additional pipeline product candidates;
- $ million to further develop our delivery technologies and CRISPR/Cas9 gene editing platform; and
- the remainder for working capital and other general corporate purposes.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. For example, we may use a portion of the net proceeds for the acquisition of businesses or technologies to continue to build our therapeutic delivery, research and development capabilities and our intellectual property position, although we currently have no agreements, commitments or understandings with respect to any such transaction. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our research and development, the status of and results from non-clinical studies or clinical trials we may commence in the future, as well as any collaborations that we may enter into with third parties for our product candidates or strategic opportunities that become available to us, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending our use of proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation instruments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings to fund the growth and development of our business. We do not intend to pay cash dividends to our stockholders in the foreseeable future.

REORGANIZATION

On August 20, 2015, we completed a series of transactions pursuant to which Intellia Therapeutics, LLC, our former sole stockholder and holding company parent, merged with and into us, and we continued to exist as the surviving corporation. Throughout this prospectus, we refer to Intellia Therapeutics, LLC's merger with and into us and the related transactions enumerated below collectively as the "Reorganization." To consummate the Reorganization, we filed a certificate of merger with the Secretary of State of the State of Delaware. In connection with the Reorganization:

- holders of Intellia Therapeutics, LLC's outstanding Class A-2 preferred units received one share of our Series A-2 preferred stock for each Class A-2 preferred unit held immediately prior to the Reorganization, with an aggregate of 3,999,999 shares of our Series A-2 preferred stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Class A-1 preferred units received one share of our Series A-1 preferred stock for each Class A-1 preferred unit held immediately prior to the Reorganization, with an aggregate of 8,571,429 shares of our Series A-1 preferred stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Junior preferred units received one share of our Junior preferred stock for each Junior Preferred Unit held immediately prior to the Reorganization, with an aggregate of 8,110,599 shares of our Junior preferred stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding common units received one share of our founder stock for each common unit held immediately prior to the Reorganization, with an aggregate of 2,298,000 shares of our founder stock issued in the Reorganization; and
- holders of Intellia Therapeutics, LLC's outstanding incentive units received shares of our restricted common stock in an amount equal in value to the value of such incentive units as determined by the applicable provisions of the Intellia Therapeutics, LLC operating agreement in effect immediately prior to the Reorganization, with an aggregate of 4,349,919 shares of our restricted common stock issued in the Reorganization.

Our Series A-2 preferred stock, Series A-1 preferred stock, Junior preferred stock and founder stock are designated as preferred stock under our amended and restated certificate of incorporation. All outstanding shares of our preferred stock convert to shares of common stock on a one-for-1.0992035 basis.

In connection with the Reorganization, by operation of law, we acquired all assets of Intellia Therapeutics, LLC and assumed all of its liabilities and obligations. The purpose of the Reorganization was to reorganize our corporate structure so that our company would continue as a corporation and so that our existing investors would own our capital stock rather than equity interests in a limited liability company. For the convenience of the reader, except as context otherwise requires, all information included in this prospectus is presented giving effect to the Reorganization.

CAPITALIZATION

The following table sets forth our cash and our capitalization as of June 30, 2015:

- on an actual basis, assuming the Reorganization occurred on such date;
- on a pro forma basis to give effect to (i) the issuance and sale of 13,336,601 shares of our Series B preferred stock in August 2015 for aggregate gross proceeds of $70.0 million, (ii) the conversion of all outstanding shares of our preferred stock into an aggregate of 39,919,350 shares of common stock immediately prior to the completion of this offering and (iii) the filing and effectiveness of our amended and restated certificate of incorporation upon the closing of this offering; and
- on a pro forma as adjusted basis to give further effect to our sale in this offering of shares of common stock at 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 the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

The following table should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Description of Capital Stock," and the consolidated financial statements and related notes appearing elsewhere in this prospectus.

	As of June 30, 2015		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands, except share and per share data)		
Cash	$ 19,765	$ 89,782	$
Stockholders' equity:			
Convertible preferred stock (Series A-1, Series A-2, Junior and Founders), $0.0001 par value; 36,500,000 shares authorized, 22,980,027 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	$ 20,819	$ —	$
Preferred stock, $0.0001 par value; no shares authorized, issued or outstanding, actual; shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	
Common stock, $0.0001 par value; 50,000,000 shares authorized, 4,151,919 shares issued and outstanding, actual; shares authorized, 44,071,269 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	—	4	
Additional paid-in capital	158	90,990	
Accumulated deficit	(13,672)	(13,672)	
Total stockholders' equity	7,305	77,322	
Total capitalization	$ 7,305	$ 77,322	$

A $1.00 increase (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 (decrease) the pro forma as adjusted amount of cash, additional paid-in capital, total stockholders' equity and total capitalization by approximately $ million, assuming 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 payable by us. Similarly, each increase (decrease) of 1.0 million shares in the

number of shares offered by us would increase (decrease) the pro forma as adjusted amount of cash, additional paid-in capital, total stockholders' equity and total capitalization by approximately $ million, assuming the assumed initial public offering price of $ per share, the midpoint of the price range 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. The pro forma as adjusted information is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

The actual, pro forma and pro forma as adjusted information set forth in the table excludes:

- 2,694,672 shares of common stock reserved for future issuance under our 2015 Plan; and
- shares of common stock reserved for future issuance under our 2015 Restated Plan, which will become effective upon the effectiveness of the registration statement of which this prospectus is a part.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value as of June 30, 2015 was $7.3 million, or $1.76 per share of our common stock, assuming the Reorganization occurred on such date. Our historical net tangible book value is the amount of our total tangible assets less our total liabilities. Historical net tangible book value per share represents historical net tangible book value divided by the 4,151,919 shares of our common stock outstanding as of June 30, 2015, assuming the Reorganization occurred on such date.

Our pro forma net tangible book value as of June 30, 2015 was $77.3 million, or $1.75 per share of our common stock. Pro forma net tangible book value per share represents historical net tangible book value divided by the total number of shares of common stock outstanding as of June 30, 2015, after giving effect to the issuance of shares of our Series B preferred stock in August 2015 and the conversion of all shares of our preferred stock then outstanding into 39,919,350 shares of common stock upon the closing of this offering.

After giving further effect to the sale of shares of common stock that we are offering at the initial public offering price of $ per share, 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 June 30, 2015 would have been approximately $ million, or approximately $ per share. This amount represents an immediate increase in pro forma net tangible book value of $ per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of approximately $ per share to investors participating in this offering.

Dilution per share to investors participating in this offering is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by investors participating in this offering. The following table illustrates this dilution (without giving effect to any exercise by the underwriters of their over-allotment option):

Assumed initial public offering price per share		$
Historical net tangible book value per share as of June 30, 2015, assuming the Reorganization occurred on such date	$ 1.76	
Pro forma increase in historical net tangible book value per share attributable to pro forma adjustments described in preceding paragraphs	(0.01)	
Pro forma net tangible book value per share as of June 30, 2015	1.75	
Increase in pro forma net tangible book value per share attributable to investors participating in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors participating in this offering		$

If the underwriters exercise their option to purchase additional shares of common stock in this offering in full at the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover of this prospectus and assuming 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 payable by us, the pro forma as adjusted net tangible book value would be $ per share, and the dilution in pro forma net tangible book value per share to investors in this offering would be $ per share.

A $1.00 increase (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 (decrease) the pro forma as adjusted net tangible book value by $ per share and the dilution to investors participating in this offering by $ per share, assuming 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 expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us would increase (decrease) the pro forma as adjusted net tangible book value by $ per share and the dilution to investors participating in this offering by $ per share, assuming the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated expenses payable by us.

The following table summarizes, on a pro forma as adjusted basis, as of June 30, 2015, the difference between the number of shares of common stock purchased from us, the total consideration paid to us and the average price per share paid by existing stockholders and by investors in this offering at an assumed initial public offering price of $ per share, 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	Percent	Amount	Percent	
	(in thousands except per share data)				
Existing stockholders		%		%	$
Investors in this offering					$
Total		100.0%		100.0%	

The above discussion and tables are based on shares of common stock issued and outstanding as of June 30, 2015 and (i) gives effect to the Reorganization, (ii) includes 39,919,350 additional shares of our common stock issuable upon the conversion of all outstanding shares of our preferred stock into shares of common stock upon the closing of this offering, including the shares of our Series B preferred stock issued in August 2015, and (iii) excludes:

- 2,694,672 shares of common stock reserved for future issuance under our 2015 Plan; and
- shares of common stock reserved for future issuance under our 2015 Restated Plan, which will become effective upon the effectiveness of the registration statement of which this prospectus is a part.

A $1.00 increase (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 (decrease) the total consideration paid by investors in this offering by approximately $ million, assuming 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 payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us would increase (decrease) the total consideration paid by investors in this offering by approximately $ million, assuming the assumed initial public offering price of $ per share, the midpoint of the price range 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.

To the extent that outstanding options are exercised or shares are issued under our 2015 Restated Plan, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities may result in further dilution to our stockholders.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected historical consolidated financial data should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements, related notes and other financial information included elsewhere in this prospectus. The selected consolidated financial data in this section are not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this prospectus.

We have derived the selected consolidated statement of operations data for the period from May 7, 2014 (inception) to December 31, 2014 and the selected consolidated balance sheet data as of December 31, 2014 from our audited consolidated financial statements included elsewhere in this prospectus. The selected consolidated statement of operations data for the six months ended June 30, 2015 and the selected consolidated balance sheet data as of June 30, 2015 have been derived from our unaudited interim consolidated financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited consolidated financial data reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information in those statements. Our historical results are not necessarily indicative of results that may be expected in the future and results of interim periods are not necessarily indicative of the results for the entire year.

	Period from May 7, 2014 (inception) to December 31, 2014	Period from May 7, 2014 (inception) to June 30, 2014	Six Months Ended June 30, 2015
	(in thousands, except per unit and per share data)		
Consolidated Statements of Operations Data:			
Collaboration revenue	$ —	$ —	$ 2,663
Operating expenses:			
Research and development	1,105	11	3,337
In-process research and development	6,055	—	—
General and administrative	2,379	167	3,943
Total operating expenses	9,539	178	7,280
Loss before income taxes	(9,539)	(178)	(4,617)
Benefit from income taxes	—	—	484
Net loss	$ (9,539)	$ (178)	$ (4,133)
Net loss per common unit, basic and diluted	$ (11.55)	$ —	$ (2.96)
Net loss per incentive unit, basic and diluted	$ —	$ —	$ (2.96)
Weighted average common units outstanding, basic and diluted	826	—	1,284
Weighted average incentive units outstanding, basic and diluted	—	—	112
Pro forma net loss per share, basic and diluted (unaudited)(1)	$ (0.82)		$ (0.17)
Pro forma weighted average shares outstanding, basic and diluted (unaudited)(1)	11,589		24,095

	As of December 31, 2014	As of June 30, 2015
	(in thousands)	
Consolidated Balance Sheet Data:		
Cash	$ 9,845	$ 19,765
Working capital(2)	7,775	11,487
Total assets	10,694	24,153
Deferred revenue	—	11,694
Total members' and stockholders' equity	7,566	7,305

(1) Basic and diluted pro forma net loss per share give effect to the conversion of all shares of preferred stock issued in connection with the Reorganization into shares of common stock immediately prior to the completion of this offering, assuming such conversion occurred on the later of May 7, 2014 (inception) or the issuance date of the corresponding unit that converted to preferred stock in the Reorganization.

(2) We define working capital as current assets less current liabilities.

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

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and related notes and other financial information appearing elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

As more fully described in the section entitled "Reorganization" appearing elsewhere in this prospectus, on August 20, 2015, we completed transactions pursuant to which Intellia Therapeutics, LLC merged with and into Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing as the surviving corporation. In connection with this merger, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC became holders of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units in Intellia Therapeutics, LLC received restricted common stock in Intellia Therapeutics, Inc.

Overview

We are a leading gene editing company focused on the development of proprietary, potentially curative therapeutics utilizing a recently developed biological tool known as CRISPR/Cas9. We believe that the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course. We intend to leverage our leading scientific expertise, clinical development experience and intellectual property position to unlock broad therapeutic applications of CRISPR/Cas9 gene editing and develop a potential new class of therapeutic products.

We believe our strong product focus, therapeutic discovery and development strength, delivery expertise and intellectual property portfolio make us well-positioned to translate the potential of the CRISPR/Cas9 system into clinically meaningful gene editing-based therapeutics. To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk-mitigated approach to selecting our initial indications, which we refer to as our sentinel indications, that have significant unmet medical need and relatively low technical and development hurdles defined by four primary axes: (i) the type of edit—knockout, repair or insertion; (ii) the presence of established therapeutic endpoints; (iii) the delivery modality for *in vivo* and *ex vivo* applications; and (iv) the appropriate CRISPR/Cas9 complex. Our sentinel indications include *in vivo* programs focused on diseases of the liver – hepatitis B virus, alpha-1 antitrypsin deficiency and inborn errors of metabolism – as well as *ex vivo* applications of the technology in chimeric antigen receptor T cell, or CAR T cell, and hematopoietic stem cell, or HSC, product candidates which are selectively partnered with our collaborator, Novartis Institutes for Biomedical Research Inc., or Novartis.

We commenced active operations in mid-2014, and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies and evaluating a clinical path for our pipeline programs. To date, we have financed our operations primarily through private placements of our equity securities and funding received from our collaboration and license agreement with Novartis. All of our revenue to date has been collaboration revenue. Since our inception and through June 30, 2015, we have raised an aggregate of approximately $32.0 million to fund our operations, of which approximately $17.0 million was through our collaboration with Novartis and approximately $15.0 million was from the sale of our equity, principally preferred securities. Additionally, in August 2015, we completed a private placement of our Series B preferred stock, raising additional gross proceeds of $70.0 million.

Since inception, we have incurred operating losses. Our net loss was $9.5 million for the period from May 7, 2014 (inception) to December 31, 2014, primarily as a result of the cost of obtaining in-licensed CRISPR/Cas9 intellectual property, and $4.1 million for the six months ended June 30, 2015. As of June 30, 2015, we had an

accumulated deficit of $13.7 million. We expect to continue to incur significant expenses and operating losses over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially as we: advance the programs for our sentinel indications toward clinical development; continue the research and development of our other potential product candidates and delivery modalities; seek to discover and develop additional product candidates; seek regulatory approvals for any product candidates that successfully complete clinical trials; ultimately establish a sales, marketing and distribution infrastructure and scale up external and/or internal manufacturing capabilities to commercialize any products for which we may obtain regulatory approval; maintain, expand and protect our intellectual property portfolio; hire additional clinical, regulatory and scientific personnel; and add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts.

Collaboration

In December 2014, we entered into a strategic collaboration and license agreement with Novartis focused on the development of new *ex vivo* CRISPR/Cas9-based therapies using CAR T cells and HSCs. Under the terms of our agreement, we received a $10.0 million upfront technology access payment in January 2015. In addition, we are entitled to receive $20.0 million in additional technology access fees and up to $20.0 million in research payments, in the aggregate, over the five-year collaboration term. We are also eligible to earn up to $130.3 million in development and regulatory milestone payments, up to $100.0 million in sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis. We retain exclusive rights to research a limited number of HSC targets for our proprietary pipeline. In addition, prior to our entry into our collaboration with Novartis, we entered into an exclusivity agreement with Novartis pursuant to which we agreed to issue preferred securities to Novartis. We received $9.0 million from the sale of such securities to Novartis. We also received approximately $4.0 million from the sale of Series B preferred stock to Novartis in our Series B preferred stock financing. See the section entitled “Certain Relationships and Related Party Transactions” appearing elsewhere in this prospectus for more information.

Financial Overview

Collaboration Revenue

Our revenue consists of collaboration revenue, including amounts recognized related to upfront technology access payments for licenses, technology access fees, research funding and milestone payments earned under collaboration and license agreement with Novartis. In December 2014, we entered into a five-year strategic collaboration and license agreement with Novartis focused on the development of *ex vivo* CRISPR/Cas9-based therapies using CAR T cells and HSCs. Under the terms of the agreement, we received a $10.0 million upfront technology access payment and $9.0 million from the sale of preferred securities to Novartis, which were determined to have a fair value of $11.6 million. In addition, we are entitled to receive an additional $20.0 million in technology access fees and up to $20.0 million in research payments. We are also eligible to receive additional milestone payments, option fees and royalties as further described in the section entitled “Business – Collaborations” appearing elsewhere in this prospectus.

Research and Development

Research and development expenses consist of expenses incurred in performing research and development activities, including the cost to obtain licenses to intellectual property, compensation and benefits, including equity-based compensation, for full-time research and development employees, facility-related expenses, overhead expenses, lab supplies and contract research services, including research services provided to us by Caribou Biosciences, Inc., or Caribou, pursuant to a services agreement, or the Caribou services agreement, we entered into with Caribou in July 2014. See the section entitled “Certain Relationships and Related Party Transactions – License Agreement and Services Agreement with Caribou Biosciences, Inc.” appearing elsewhere in this prospectus for more information. In the early phases of development, our research and development costs are often devoted to product platform and proof-of-concept studies that are not necessarily allocable to a specific target; therefore, we have not yet begun tracking our expenses on a program-by-program basis.

In-Process Research and Development

In-process research and development expense represents the cost of acquiring in-process research and development rights to our fundamental CRISPR/Cas9 intellectual property from Caribou.

General and Administrative

General and administrative expenses consist primarily of salaries and benefits, including equity-based compensation, for our executive, finance, intellectual property, business development and support functions. Other general and administrative expenses include allocated facility-related costs not otherwise included in research and development expenses, travel expenses and professional fees for auditing, tax and legal services, including intellectual property-related legal services, and other consulting fees and expenses.

Results of Operations for the Period from May 7, 2014 (inception) to June 30, 2014 and the Six Months Ended June 30, 2015

Collaboration Revenue

In December 2014, we entered into a five-year strategic collaboration and license agreement with Novartis focused on the development of *ex vivo* CRISPR/Cas9-based therapies using CAR T cells and HSCs. Under the terms of the agreement, we received a $10.0 million upfront technology access payment and $9.0 million from the sale of preferred securities to Novartis, which were determined to have a fair value of $11.6 million. In addition, we are entitled to receive an additional $20.0 million in technology access fees and up to $20.0 million in research payments. We are also eligible to receive additional milestone payments, option fees and royalties as further described in the section entitled “Business – Collaborations.”

We determined the fixed portion of consideration under the arrangement to be the $30.0 million of total technology access fees, for which there are no contingent terms. Of the $30.0 million in fixed consideration, $2.6 million was allocated to the preferred securities issued to Novartis, representing the difference between the price paid for these securities and their fair values at date of issuance. We are recognizing the net consideration of $27.4 million as collaboration revenue over the five-year performance period of the arrangement. We recognized collaboration revenue of $2.7 million in the six months ended June 30, 2015, representing the recognition of these amounts from deferred revenue. We did not recognize any collaboration revenue during the period from May 7, 2014 (inception) to June 30, 2014.

Research and Development

We recorded $3.3 million in research and development expenses during the six months ended June 30, 2015, compared to an immaterial amount in the period from May 7, 2014 (inception) to June 30, 2014, during which we were primarily engaged in activities to form our company. The $3.3 million in research and development expenses during the six months ended June 30, 2015 was primarily comprised of salaries and related costs for our research and development team, which grew from three employees as of December 31, 2014 to 18 as of June 30, 2015, third-party research service fees under the Caribou service agreement and laboratory supplies and materials for internal use. We expect research and development expenses to increase as we continue to grow our research and development team and continue to advance our research plans.

In-Process Research and Development

We did not record any in-process research and development expense in the period from May 7, 2014 (inception) to June 30, 2014 or the six months ended June 30, 2015.

General and Administrative

We recorded $3.9 million in general and administrative expenses during the six months ended June 30, 2015, compared to $0.2 million in the period from May 7, 2014 (inception) to June 30, 2014, during which such costs primarily represented legal and other administrative costs incurred to form our company. The $3.9 million in general and administrative expenses during the six months ended June 30, 2015 was primarily comprised of

salaries and benefits costs as well as consulting and professional fees, including legal fees and intellectual property costs, such as amounts incurred resulting from our obligation to pay 30.0% of Caribou's patent prosecution filing and maintenance costs for our licensed intellectual property. We expect general and administrative expenses to continue to increase as we grow our organization, including, upon any successful completion of this offering, as we incur additional costs associated with being a publicly traded company, including increased legal, accounting and corporate governance costs.

Benefit from Income Taxes

For the six months ended June 30, 2015, we recorded an income tax benefit of $0.5 million related to the $2.6 million difference between the cash proceeds received from Novartis for our issuance of Class A-1 and A-2 preferred units in September and December 2014 and the fair values of those units on their respective issuance dates. Intraperiod tax allocation rules require us to allocate our provision for income taxes between continuing operations and other categories of earnings, such as items credited directly to members' equity. In periods in which we have a year-to-date pre-tax loss from continuing operations and pre-tax income in other categories of earnings, we must allocate the income tax provision to the other categories of earnings. We then record a related income tax benefit in continuing operations.

During the six months ended June 30, 2015, we allocated $2.6 million from the $30.0 million total fixed amount of consideration under the collaboration agreement with Novartis to the carrying value of the Class A-1 and A-2 preferred units to record those units based on their fair value at date of issuance. As a result of this allocation, during the six months ended June 30, 2015, we recorded an income tax provision of $1.0 million within members' equity as well as a corresponding income tax benefit of $0.5 million within continuing operations and a $0.5 million accrual for intraperiod tax allocation on our consolidated balance sheet.

Results of Operations for the Period from May 7, 2014 (Inception) to December 31, 2014

Collaboration Revenue

We did not recognize any collaboration revenue during the period from May 7, 2014 (inception) to December 31, 2014.

Research and Development

Our $1.1 million in research and development expenses for the period from May 7, 2014 (inception) to December 31, 2014 consisted primarily of third-party research services under the Caribou services agreement and personnel-related costs for our internal research and development staff and related expenses, including salaries, benefits and equity-based compensation.

In-Process Research and Development

Our $6.1 million in in-process research and development expenses for the period from May 7, 2014 (inception) to December 31, 2014 represented the cost of acquiring in-process research and development rights to our foundational CRISPR/Cas9 intellectual property from Caribou.

General and Administrative

Our $2.4 million in general and administrative expenses for the period from May 7, 2014 (inception) to December 31, 2014 primarily related to our internal general and administrative salaries and related expenses, legal, patent and consulting fees associated with our initial start-up and costs incurred to pay 30.0% of Caribou's patent prosecution filing and maintenance costs for our licensed intellectual property pursuant to the license agreement with Caribou.

Benefit from Income Taxes

We did not recognize any benefit from income taxes during the period from May 7, 2014 (inception) to December 31, 2014.

Liquidity and Capital Resources

Since our inception through June 30, 2015, we have raised an aggregate of $32.0 million to fund our operations, of which $17.0 million was through our collaboration with Novartis and $15.0 million was from the sale of equity securities. As of June 30, 2015, we had $19.8 million in cash. In August 2015, we completed our Series B preferred stock financing, which resulted in gross proceeds to us of $70.0 million.

We are entitled to receive technology access fees and research payments and are eligible to earn a significant amount of milestone payments and royalties, in each case, on a per-product basis under our collaboration with Novartis. Our ability to earn these milestones and the timing of achieving these milestones is dependent upon the outcome of our research and development activities and is uncertain at this time. Our rights to payments under our collaboration agreement are our only committed external source of funds.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, research and development services, compensation and related expenses, laboratory and related supplies, legal and other regulatory expenses, patent prosecution filing and maintenance costs for our licensed intellectual property and general overhead costs. We expect our expenses to increase compared to prior periods in connection with our ongoing activities, particularly as we continue research and development and preclinical activities. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company.

Because our research programs are still in preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of any future product candidates or whether, or when, we may achieve profitability. Until such time, as we can generate substantial product revenues, if ever, we expect to finance our cash needs through a combination of equity or debt financings and collaboration arrangements. We have two sources of funding under our collaboration with Novartis. We are entitled to technology access fees and research payments. Additionally, we are eligible to earn milestone payments and royalties, in each case, on a per-product basis under this collaboration. Except for these sources of funding, upon completion of this offering, we will not have any committed external source of liquidity. To the extent that we raise additional capital through the future sale of equity or debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing stockholders. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. 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 or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Outlook

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that the net proceeds from this offering, together with our existing cash as of June 30, 2015, the $70.0 million in gross proceeds from our Series B preferred stock offering as well as technology access and research funding that we expect to receive from Novartis, will enable us to fund our operating expenses and capital expenditures for at least the next months, without giving effect to any potential milestone payments we may receive under our collaboration agreement with Novartis. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect.

Our ability to generate revenue and achieve profitability depends significantly on our success in many areas, including: developing our delivery technologies and our CRISPR/Cas9 technology platform; selecting appropriate product candidates to develop; completing research and preclinical and clinical development of selected product candidates; obtaining regulatory approvals and marketing authorizations for product candidates for which we complete clinical trials; developing a sustainable and scalable manufacturing process for product candidates; launching and commercializing product candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor; obtaining market acceptance of our product candidates; addressing any competing technological and market developments; negotiating favorable terms in any collaboration, licensing, or other arrangements into which we may enter; maintaining good relationships with our collaborators and licensors; maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trade secrets, and know-how; and attracting, hiring, and retaining qualified personnel.

Cash Flows

The following table summarizes our cash flows for the period from May 7, 2014 (inception) to December 31, 2014 and the period from May 7, 2014 (inception) to June 30, 2014 and the six months ended June 30, 2015:

	Period from May 7, 2014 (inception) to December 31, 2014	Period from May 7, 2014 (inception) to June 30, 2014	Six Months Ended June 30, 2015
		(in thousands)	
Net cash (used in) provided by operating activities	$ (2,322)	$ (4)	$ 6,995
Net cash used in investing activities	(575)	—	(1,703)
Net cash provided by financing activities	12,742	100	4,628

Net Cash (Used in) Provided by Operating Activities

Net cash used in operating activities of $2.4 million during the period from May 7, 2014 (inception) to December 31, 2014 consisted primarily of compensation and related expenses as well as legal and consulting costs incurred with the initial phases of establishing our company's operations and early research activities performed by Caribou. Net cash provided by operating activities of $7.0 million in the six months ended June 30, 2015 primarily reflected the receipt of a $10.0 million upfront technology access payment and $5.0 million annual technology access fee under the Novartis collaboration agreement; partially offset by compensation, lab, legal and consulting expenses paid by us during this period.

Net Cash Used in Investing Activities

Net cash used in investing activities during the period from May 7, 2014 (inception) to December 31, 2014 related primarily to the July 2014 acquisition of in-process research and development rights to our foundational CRISPR/Cas9 intellectual property from Caribou, as well as the purchase of property and equipment in connection with our move to our office space in Cambridge, Massachusetts. Purchases of property and equipment increased during the six months ended June 30, 2015 as we completed the build-out of this office and laboratory space.

Net Cash Provided by Financing Activities

Net cash provided by financing activities related to the sale of preferred securities in all periods presented. In June 2014, we sold shares of common stock to Atlas Venture Fund IX, LP, or Atlas Venture Fund IX, for net proceeds of $0.1 million. In the remainder of 2014, we issued common and preferred securities to Atlas Venture Fund IX and Novartis for aggregate net proceeds of $12.6 million. In the six months ended June 30, 2015, we completed the sale of preferred securities to Atlas Venture Fund IX, for net proceeds of $2.0 million and received $2.6 million in consideration from Novartis related to their purchase of preferred securities from us.

Contractual Obligations and Contingent Liabilities

The following summarizes our contractual obligations as of June 30, 2015:

	Payments Due by Period				
	Total	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years
	(in thousands)				
Fixed payments to Caribou	$2,750	$2,250	$ 500	$ —	$ —
Property lease	3,491	571	1,556	1,364	—
Total contractual obligations	$6,241	$2,821	$2,056	$1,364	$ —

- *Fixed payments to Caribou.* Represents obligations by us to make fixed payments under the Caribou services agreement.
- *Property lease.* Represents future minimum lease payments under a non-cancelable operating lease in effect as of June 30, 2015. The minimum lease payments do not include common area maintenance charges or real estate taxes.

The contractual obligations table does not include any potential future pass-through milestone payments of up to $26.4 million or royalty payments we may be required to make under the Caribou license agreement, through which we have received rights to CRISPR/Cas9 intellectual property for specified human therapeutic applications, due to the uncertainty of the occurrence of the events requiring payment under that agreement. The table also excludes our obligation to pay 30.0% of Caribou's patent prosecution filing and maintenance costs for licensed intellectual property as such costs cannot be reliably estimated until incurred.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as of the date of the balance sheets and the reported amounts of collaboration revenue and expenses during the reporting periods. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances at the time such estimates are made. Actual results and outcomes may differ materially from our estimates, judgments and assumptions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in the consolidated financial statements prospectively from the date of the change in estimate.

We define our critical accounting policies as those accounting principles generally accepted in the United States of America that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations as well as the specific manner in which we apply those principles. We believe the critical accounting policies used in the preparation of our consolidated financial statements which require significant estimates and judgments are as follows:

Revenue Recognition

We recognize revenue for each unit of accounting when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectability is reasonably assured.

The terms of our collaboration and license agreement contain multiple deliverables, which include licenses to CRISPR/Cas9-based therapeutic products directed to specific targets, referred to as exclusive licenses, as well as research and development activities to be performed by us on behalf of the collaboration partner related to the

licensed targets. Payments that we may receive under these agreements include non-refundable technology access fees, payments for research activities, payments based upon the achievement of specified milestones and royalties on any resulting net product sales.

Multiple-Element Arrangements

Our collaboration and license agreement represents a multiple-element arrangement. We evaluate our collaborative agreements for proper classification in our statements of operations and comprehensive loss based on the nature of the underlying activity. We generally reflect as revenue amounts due under our collaborative agreements related to reimbursement of development activities as we are generally the principal under the arrangement.

We evaluate multiple-element arrangements to determine (i) the deliverables included in the arrangement and (ii) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. When deliverables are separable, consideration received is allocated to the separate units of accounting based on the relative selling price method and the appropriate revenue recognition principles are applied to each unit. When we determine that an arrangement should be accounted for as a single unit of accounting, we must determine the period over which the performance obligations will be performed and revenue will be recognized. This evaluation requires us to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that (i) the delivered item has value to the customer on a standalone basis and (ii) if the arrangement includes a general right of return with respect to the delivered item, delivery or performance of the undelivered item is considered probable and substantially in our control. In assessing whether an item has standalone value, we consider factors such as the research, development, manufacturing and commercialization capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, we consider whether the collaboration partner can use any other deliverable for its intended purpose without the receipt of the remaining deliverable, whether the value of the deliverable is dependent on the undelivered item, and whether there are other vendors that can provide the undelivered items.

The consideration received under an arrangement that is fixed or determinable is then allocated among the separate units of accounting based on the relative selling prices of the separate units of accounting. We determine the selling price of a unit of accounting within each arrangement using vendor-specific objective evidence of selling price, if available; third-party evidence of selling price if vendor-specific objective evidence is not available; or best estimate of selling price, if neither vendor-specific objective evidence nor third-party evidence is available. Determining the best estimate of selling price for a unit of accounting requires significant judgment. In developing the best estimate of selling price for a unit of accounting, we consider applicable market conditions and relevant entity-specific factors, including factors that were contemplated in negotiating the agreement with the customer and estimated costs. We validate the best estimate of selling price for units of accounting by evaluating whether changes in the key assumptions used to determine the best estimate of selling price will have a significant effect on the allocation of arrangement consideration between multiple units of accounting.

We recognize arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, we recognize revenue from the combined unit of accounting over the contractual or estimated performance period for the undelivered items, which is typically the term of our research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then we recognize revenue under the arrangement on a straight-line basis over the period we are expected to complete our performance obligations. Conversely, if the pattern of performance over which the service is provided to the customer can be determined and objectively measurable performance measures exist, then we recognize revenue under the arrangement using the proportional performance method. Revenue recognized is limited to the lesser of the cumulative amount of payments received or the cumulative amount of revenue earned, as determined using the straight-line method or proportional performance method, as applicable, as of the period ending date.

Significant management judgment is required in determining the level of effort required under an arrangement and the period over which we are expected to complete our performance obligations under an arrangement. Steering committee services that are not inconsequential or perfunctory and that are determined to be performance obligations are combined with other research services or performance obligations required under an arrangement, if any, in determining the level of effort required in an arrangement and the period over which we expect to complete our aggregate performance obligations.

Milestone Revenue

Our collaboration and license agreement includes contingent milestone payments related to specific development, regulatory and sales-based milestones. Development and regulatory milestones are typically payable when a product candidate initiates or advances in clinical trial phases, upon submission for marketing approval with regulatory authorities, and upon receipt of actual marketing approvals for a therapeutic or for additional indications. Sales-based milestones are typically payable when annual sales reach specified levels.

We evaluate whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation includes an assessment of whether: (i) the consideration is commensurate with either our performance to achieve the milestone or the enhancement of the value of the delivered item as a result of a specific outcome resulting from our performance to achieve the milestone, (ii) the consideration relates solely to past performance, and (iii) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. We evaluate factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the particular milestone and the level of effort and investment required to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether a milestone satisfies all of the criteria required to conclude that a milestone is substantive. We will recognize revenue in its entirety upon successful accomplishment of any substantive milestones, assuming all other revenue recognition criteria are met. Milestones that are not considered substantive are recognized as earned if there are no remaining performance obligations or over the remaining period of performance, with a cumulative catch-up being recognized for the elapsed portion of the period of performance, assuming all other revenue recognition criteria are met.

Non-refundable research, development and regulatory milestones that are expected to be achieved as a result of our efforts during the period of our performance obligations under the collaboration and license agreements are generally considered to be substantive and are recognized as revenue upon the achievement of the milestone, assuming all other revenue recognition criteria are met. If not considered to be substantive, revenue from achievement of milestones is initially deferred and recognized over the remaining term of our performance obligations. Milestones that are not considered substantive because we do not contribute effort to their achievement are recognized as revenue upon achievement, assuming all other revenue recognition criteria are met, as there are no undelivered elements remaining and no continuing performance obligations on our part.

Amounts received prior to satisfying the revenue recognition criteria listed above are recorded as deferred revenue in the accompanying balance sheets. Although we follow detailed guidelines in measuring revenue, certain judgments affect the application of our revenue policy. For example, in connection with our existing collaboration agreement, we have recorded on the balance sheet short-term and long-term deferred revenue based on our best estimate of when such revenue will be recognized. However, this estimate is based on our current research plan and, if our research plan should change in the future, we may recognize a different amount of deferred revenue over the following 12-month period.

The estimate of deferred revenue also reflects management’s estimate of the periods of our involvement in the collaboration. Our primary performance obligations under this collaboration consist of research and development services. In certain instances, the timing of satisfying these obligations can be difficult to estimate. Accordingly, our estimates may change in the future. Such changes to estimates would result in a change in prospective revenue recognition amounts. If these estimates and judgments change over the course of our collaborative agreement, it may affect the timing and amount of revenue that we will recognize and record in future periods.

Equity-Based Compensation

We measure employee equity-based compensation based on the grant date fair value of the incentive unit awards and common unit awards and recognize equity-based compensation expense, net of estimated forfeitures, on a straight-line basis over the requisite service period of the awards, which is generally the vesting period of the respective award. Compensation expense is recognized for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, we have considered our historical experience to estimate pre-vesting forfeitures for service-based awards. We estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates.

We measure common and incentive security-based awards granted to consultants and non-employees based on the fair value of the award on the date of grant. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of the common or incentive securities.

We classify equity-based compensation expense in our consolidated statement of operations and comprehensive loss in the same manner in which the award recipient's salary and related costs are classified or in which the award recipients' service payments are classified.

Determination of the Fair Value of Equity Securities

As there has been no public market for our common or incentive securities to date, the estimated fair value of our common and incentive securities has been determined by our board of directors as of the date of each award grant, with input from management, considering our most recently available third-party valuations of common and incentive securities and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Our common and incentive security valuations were prepared using either an option-pricing method, or OPM, or a probability-weighted expected return method, or PWERM, which used a combination of market approaches and an income approach to estimate our enterprise value. The OPM treats common securities and preferred securities as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common and incentive securities have value only if the funds available for distribution to members exceeded the value of the preferred security liquidation preference at the time of the liquidity event, such as a strategic sale or a merger. The PWERM is a scenario-based methodology that estimates the fair value of common and incentive securities based upon an analysis of future values for the company, assuming various outcomes. The common and incentive security values are based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of common, incentive and preferred securities. The future value of the common and incentive securities under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common and incentive securities. These third-party valuations were performed at various dates, which resulted in valuations of our common and incentive securities of $0.37 and $0.13 per share, respectively, as of July 31, 2014 and $1.15 and $0.79 per share, respectively, as of December 31, 2014. In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common and incentive securities as of each grant date, which may be a date later than the most recent third-party valuation date, including:

- the prices of our preferred securities sold to or exchanged between outside investors in arm's length transactions, and the rights, preferences and privileges of our preferred securities as compared to those of our common and incentive securities, including the liquidation preferences of our preferred securities;

- the progress of our research and development efforts, including the status of preclinical studies and planned clinical trials for our product candidates;
- the lack of liquidity of our equity as a private company;
- our stage of development and business strategy and the material risks related to our business and industry;
- the achievement of enterprise milestones, including entering into collaboration and license agreements;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- any external market conditions affecting the biotechnology industry, and trends within the biotechnology industry;
- the likelihood of achieving a liquidity event for the holders of our common and incentive securities, such as an initial public offering, or IPO, or a sale of our company, given prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in the biopharmaceutical industry.

The assumptions underlying these valuations represent management's best estimates, which involve inherent uncertainties and the application of management judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our equity-based compensation expense could be materially different.

Following the closing of this offering, the fair value of our common stock will be determined based on the quoted market price of our common stock.

Incentive and Common Security Awards Granted

The following table sets forth by grant date and type of award the number of securities granted since inception, which were granted for no returned consideration:

Grant Date	Type of Award Granted	Number of Securities Underlying Grants	Grant Date Fair Value Per Unit
July 31, 2014	Common units	1,351,763	$ 0.37
July 31, 2014	Incentive units	2,297,999	$ 0.13
October 1, 2014	Incentive units	270,353	$ 0.79
October 30, 2014	Incentive units	27,035	$ 0.79
November 12, 2014	Incentive units	27,035	$ 0.79
November 13, 2014	Incentive units	27,035	$ 0.79
April 15, 2015	Incentive units	929,505	$ 0.79
June 23, 2015	Incentive units	221,700	$ 0.79
June 29, 2015	Incentive units	142,500	$ 0.79
July 6, 2015	Incentive units	63,000	$ 0.79
July 13, 2015	Incentive units	135,000	$ 0.79

Emerging Growth Company Status

The Jumpstart Our Business Startups Act of 2012, or the JOBS Act, permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We are irrevocably choosing to "opt out" of this provision and, as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2014-09, *Revenue from Contracts with Customers* (*Topic 606*), which supersedes existing revenue recognition guidance. The standard'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 standard defines a five-step process to achieve this principle and will require companies to use more judgment and make more estimates than under the current guidance. We expect that these judgments and estimates will include identifying performance obligations in the customer contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. In July 2015, the FASB voted to delay the effective date of this standard such that ASU 2014-09 will be effective for us for annual periods beginning after December 15, 2017 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. We are evaluating the impact that the adoption of ASU 2014-09 will have on our consolidated financial statements.

In June 2014, the FASB issued ASU, No. 2014-10, *Development Stage Entities*. The amendments in this update removed all incremental financial reporting requirements, including inception-to-date information and certain other disclosures currently required under GAAP, in the financial statements of development stage companies. The amendments are effective for annual reporting periods beginning after December 15, 2014 and interim reporting periods beginning after December 15, 2015. Early adoption is permitted. We elected to early adopt this guidance and, therefore, have not presented inception-to-date and other related disclosures in our consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern*. ASU 2014-15 amends ASC 205-40, *Presentation of Financial Statements—Going Concern*, by providing guidance on determining when and how reporting entities must disclose going-concern uncertainties in their financial statements, including requiring management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date of issuance of the entity's financial statements and providing certain disclosures if there is substantial doubt about the entity's ability to continue as a going concern. ASU 2014-15 will be effective for us for annual periods ending after December 15, 2016 and interim periods within annual periods beginning after December 15, 2016. We are evaluating the potential impact of this ASU on our consolidated financial statements but believe its adoption will have no impact on our financial position, results of operations or cash flows.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation (Topic 810)—Amendments to the Consolidation Analysis*. ASU 2015-02 modifies the existing consolidation guidance in ASC 810, *Consolidation*, by significantly changing the consolidation analysis reporting organizations are required to complete in determining whether to consolidate certain legal entities. ASU 2015-02 requires either a retrospective or modified retrospective approach to adoption and will be effective for us for annual periods beginning after December 15, 2015 and for interim periods within those fiscal years. We are evaluating the impact of the adoption of ASU 2015-02 on our consolidated financial statements but believe its adoption will have no material impact on our financial position, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-05, *Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*. ASU 2015-05 amends ASC 350-40, *Internal-Use Software*, by providing customers with guidance on determining whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software. ASU 2015-05 will be effective for us for annual periods beginning after December 15, 2015 and interim period within annual periods beginning after December 15, 2016. We are evaluating the impact that this ASU may have on our consolidated financial statements, if any.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements as defined under the rules and regulations of the Securities and Exchange Commission.

Quantitative and Qualitative Disclosures about Market Risk

We face limited market risk as our financial instruments as of June 30, 2015 consisted entirely of cash. We expect to invest a portion of our cash in interest-bearing money market accounts and prime money market funds in the near term at which point our financial instruments and financial position will have an inherent market risk related to potential losses arising from adverse changes in interest rates. However, we do not expect this risk to be significant due to the planned short-term maturities and low risk profiles of such cash equivalents.

We occasionally contract with vendors internationally. Transactions with these vendors are predominantly settled in U.S. dollars, and, therefore, we believe that we have only minimal exposure to foreign currency exchange risks. We do not hedge against foreign currency risks.

BUSINESS

Overview

We are a leading gene editing company focused on the development of proprietary, potentially curative therapeutics utilizing a recently developed biological tool known as the CRISPR/Cas9 system. We believe that the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course. We intend to leverage our leading scientific expertise, clinical development experience and intellectual property position to unlock broad therapeutic applications of CRISPR/Cas9 gene editing and develop a potential new class of therapeutic products.

In 2012, one of our co-founders, Dr. Jennifer Doudna, and her colleagues published a paper in the journal *Science* describing the use of CRISPR/Cas9 as a gene editing tool. Gene editing is the precise and targeted modification of the genetic material of cells. Since the publication of Dr. Doudna's landmark paper, more than 1,500 research papers have been published on the CRISPR/Cas9 technology. The CRISPR/Cas9 system offers a revolutionary approach for therapeutic development due to its broad potential to precisely edit genes. This system can be used to make three general types of edits: knockouts, repairs and insertions. Each of these editing strategies takes advantage of naturally-occurring biological mechanisms to effect the desired genetic alteration. This approach has the potential to provide curative therapeutic options for patients with chronic diseases by addressing the underlying cause of the disease.

We plan to use the CRISPR/Cas9 system across two broad areas: *in vivo* applications, in which CRISPR/Cas9 therapeutic products are delivered directly to target cells within the body, and *ex vivo* applications, in which cells are removed from a patient's body, modified using CRISPR/Cas9 and then returned to the patient. Initially, our *in vivo* pipeline includes proprietary programs targeting hepatitis B virus, or HBV, alpha-1 antitrypsin deficiency, or AATD, and inborn errors of metabolism, or IEMs. Our initial *ex vivo* pipeline includes both proprietary and partnered programs focused on chimeric antigen receptor T cells, or CAR T cells, and hematopoietic stem cells, or HSCs, which we are developing in collaboration with Novartis Institutes for Biomedical Research, Inc., or Novartis.

To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk- mitigated approach to selecting our initial indications, which we refer to as our sentinel indications. Specifically, we have selected indications with significant unmet medical need and which have relatively low technical and development hurdles based on four primary axes:

- the type of edit— knockout, repair or insertion;
- the presence of established therapeutic endpoints;
- the delivery modality for *in vivo* and *ex vivo* applications; and
- the appropriate CRISPR/Cas9 complex.

These selection criteria position us to build a risk-diversified pipeline, where we are not reliant on any single delivery technology or editing approach for success. In addition, we can apply the learnings from these approaches to support multiple value drivers thereby increasing the probabilities of success in our sentinel indications, generating insights that will accelerate the development of subsequent therapeutic products and broadening the opportunity for potential strategic alliances.

The following table illustrates our current discovery programs and opportunities:

	Intellia Rights	Type of Edit	Upcoming Milestones: Next 12–24 Months
In Vivo			
Delivery			
Lipid Nanoparticle	Proprietary	Knockout, repair	Demonstrate *in vivo* delivery first with knockout editing, followed by more complex repair editing
Programs			
Hepatitis B Virus	Proprietary	Knockout	Demonstrate *in vivo* proof-of-concept
Alpha-1 Antitrypsin Deficiency	Proprietary	Knockout, repair	Demonstrate *in vivo* proof-of-concept
Inborn Errors of Metabolism	Proprietary	Knockout, repair, insertion	Select lead indication based on *in vitro* data
Ex Vivo			
Programs			
CAR T Cells	Partnered with Novartis	Undisclosed	Advance preclinical development
Hematopoietic Stem Cells	Proprietary and others selectively partnered with Novartis	Undisclosed	Advance preclinical development

Delivery plays a key role in our *in vivo* therapeutic approach. Our lipid nanoparticle, or LNP, delivery technology has demonstrated delivery of nucleic acids to the liver, our initial organ of focus for *in vivo* applications. With our team's expertise with LNP delivery technology, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans. In parallel, we are developing additional delivery vehicles, including viral vectors, that we believe will allow us to target other organs, such as the lung for cystic fibrosis, or CF.

We have chosen three sentinel *in vivo* indications employing different editing strategies to explore the scope of gene edits with the CRISPR/Cas9 system:

- HBV program, which utilizes a knockout strategy to target covalently closed circular DNA, or cccDNA;
- AATD program, which utilizes either a gene knockout strategy or a gene repair strategy; and
- IEM program, which has the potential to utilize all three editing approaches, including targeted DNA insertion.

In addition to giving us three potential product opportunities, each of these programs will provide us with learnings that we intend to translate to a broader set of disease indications requiring the same types of edits.

Our sentinel *ex vivo* programs in CAR T cell and HSC applications are being developed in partnership with Novartis, where we retain the right to develop and commercialize rights to certain HSC programs. In CAR T cell therapy, naturally-occurring immune cells, specifically T cells, are modified *ex vivo* by inserting a chimeric antigen receptor, or CAR, to selectively target cancer cells by activating an immune response against them. We believe CRISPR/Cas9 can further enhance CAR T cells by, for example, generating a universal donor CAR T cell or modifying pathways. In the HSC programs, we can apply CRISPR/Cas9 to correct defective proteins in HSCs of a given patient for the potential treatment of blood disorders or primary immune deficiencies. These sentinel programs will help inform the broader applicability of CRISPR/Cas9 in an *ex vivo* setting, particularly in other relevant types of immune cells, such as natural killer, or NK, cells and tumor infiltrating lymphocytes, or TILs, for immuno-oncology applications, T regulatory cells, or Tregs, for

autoimmune disorders and other cell types, including induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells for tissue-targeted treatments, for which we retain proprietary rights. Our *ex vivo* delivery approach includes clinically proven delivery methods, such as electroporation, an electrical charge-based technique for delivering molecules into cells. In parallel, we are exploring other delivery methods for *ex vivo* introduction of biological material to cells, which may provide advantages in delivery efficiency or cell viability.

We believe our approach to selecting our sentinel *in vivo* and *ex vivo* programs positions us to build a pipeline across a range of indications and to generate a wealth of data that opens the potential therapeutic applications of the CRISPR/Cas9 technology across a broad range of diseases. Our collaboration and intellectual property strategies focus on leveraging existing third-party expertise in therapeutic research, preclinical and clinical development, regulatory affairs, manufacturing and commercialization, while also enhancing our industry-leading access to evolving gene editing technology and delivery vehicles. Through our product research and development programs, we believe we can apply CRISPR/Cas9 technology to improve the lives of patients with significant unmet medical need.

To enable further development of our technology and *in vivo* and *ex vivo* programs, we completed a private placement for gross proceeds of $70.0 million of our Series B preferred stock in August 2015 led by OrbiMed HealthCare Fund Management. Additional investors in this financing included Fidelity Management & Research, Janus Capital Management, Foresite Capital, Sectoral Asset Management Inc., EcoR1 Capital LLC, our existing investors, Atlas Venture Fund IX and Novartis, as well as other leading mutual fund and healthcare investors.

Our Team

We have assembled a world-class team of executives, founders and advisors who are dedicated to the development of CRISPR/Cas9-based therapeutic products for patients with significant unmet medical need. Our team's expertise spans CRISPR/Cas9 and broader gene editing technologies, *in vivo* and *ex vivo* therapeutic delivery technologies, preclinical and clinical development, product scale-up and manufacturing, cell and molecular biology, intellectual property, finance and regulatory affairs.

Our executive team comprises leaders with proven track records of successfully translating scientific visions into tangible therapies, solving complex issues in delivering novel therapeutics and progressing new and novel therapies through regulatory approval. Our management team includes the following key individuals:

- ***Nessan Bermingham, Ph.D., our Founder, President and Chief Executive Officer***, who brings 15 years of experience in biotechnology investing and operational oversight across a number of companies, most recently as a venture partner at Atlas Venture;
- ***Thomas M. Barnes, Ph.D., our Chief Scientific Officer***, who brings over 20 years of experience in drug discovery, including at Eleven Biotherapeutics Inc., Ore Pharmaceuticals, Inc. and Millennium Pharmaceuticals, Inc.;
- ***John M. Leonard, M.D., our Chief Medical Officer***, who, during 21 years at AbbVie Inc. and Abbott Laboratories, oversaw the development and approval of 15 medicines, including Humira and Kaletra;
- ***David V. Morrissey, Ph.D., our Chief Technology Officer***, who was instrumental in the development of LNP technology at Novartis and brings over 17 years of experience in drug development, including at Novartis, Sirna Therapeutics Inc., and Bristol-Myers Squibb;
- ***José E. Rivera, J.D., our Chief Operating Officer and Chief Legal Officer***, who brings 17 years of experience in managing complex legal issues in the biopharmaceutical and healthcare industries, including strategically developing, protecting and defending valuable intellectual property at Abbott Laboratories; and
- ***Sapna Srivastava, Ph.D., our Chief Financial and Strategy Officer***, who brings more than 13 years of financial and industry experience as a biotechnology analyst at Goldman Sachs & Co., Morgan Stanley and J.P. Morgan Chase & Co.

In addition, our founders and scientific advisors embody the core elements of our therapeutic approach, having experience with the CRISPR/Cas9 complex, delivery modalities and target diseases. They are considered to be some of the world's leading experts in CRISPR/Cas9 technology and in their respective fields. One of our co-founders, Dr. Jennifer Doudna, is widely recognized for her contributions to the development of CRISPR/Cas9 as a genome engineering tool. Additional members of our advisory team have made significant contributions to the understanding of CRISPR/Cas systems and help support the foundation we have today for developing human therapeutics based on gene editing technologies.

Strategy

Our goal is to build a fully integrated, product-driven biotechnology company, focused on developing and commercializing potentially curative CRISPR/Cas9-based therapeutics. Our approach to advancing the broad potential of gene editing includes our plans to:

Focus on Sentinel Indications that Enable Us to Fully Develop the Potential of the CRISPR/Cas9 System. To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk-mitigated approach to selecting sentinel indications that have significant unmet medical need and which have relatively low technical and development hurdles based on four primary axes:

- the type of edit—knockout, repair or insertion;
- the presence of established therapeutic endpoints;
- the delivery modality for *in vivo* and *ex vivo* applications; and
- the appropriate CRISPR/Cas9 complex.

These selection criteria position us to build a risk-diversified pipeline, where we are not reliant on any single delivery technology or editing approach for success. In addition, we can apply the learnings from these approaches to support multiple value drivers thereby increasing the probabilities of success in our sentinel indications, generating insights that will accelerate the development of subsequent therapeutic products and broadening the opportunity for potential strategic alliances.

Aggressively Pursue* In Vivo *Liver Indications to Develop Therapeutics Rapidly with Existing Delivery Technology. For our sentinel *in vivo* indications, we selected well-validated targets in diseases with significant unmet medical need where there are predictive biomarkers with strong disease correlation and where the CRISPR/Cas9 technology and delivery tools existing today could be applied towards developing a novel therapeutic. Our initial *in vivo* pipeline opportunities target diseases of the liver, which we believe we can develop using our existing LNP delivery technology. The first *in vivo* indications we are evaluating are HBV, AATD and IEMs.

Continue to Develop and Expand our* Ex Vivo *Therapeutic Programs. In collaboration with Novartis, we intend to rapidly develop the CAR T cell and HSC programs. We believe that our sentinel work in CAR T cells and HSCs will guide us in building a portfolio of additional proprietary *ex vivo* opportunities, including expanded immuno-oncology therapeutics beyond CAR T cells, such as modified NK cells and TILs, and autoimmune applications of Tregs, in addition to potential applications for other cell types such as induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells.

Continue to Leverage Strategic Partnerships to Accelerate Clinical Development. We view strategic partnerships as important drivers for accelerating the achievement of our goal of rapidly developing potentially curative therapies. The potential application of CRISPR/Cas9 is extremely broad, and we plan to continue to identify partners who can contribute meaningful resources and insights to our programs and allow us to more rapidly expand our impact to broader patient populations. Our partnership focusing on CAR T cells with Novartis, an industry leader with one of the most advanced clinical CAR T cell programs, exemplifies this strategy.

Grow Our Leadership Position in the Field of Gene Editing. We are committed to broadening our capabilities to remain at the cutting edge of gene editing research. We will continue to invest internally in

developing our innovative delivery modalities, technologies and tools to advance our therapeutic programs. We will also systematically explore accessing external technologies or opportunities to enhance our leadership position in developing innovative therapeutics.

Gene Editing

Gene editing is the precise and targeted modification of the genetic material of cells. Gene editing works by using an enzyme to make a cut at a particular sequence in the genome, followed by deletions, repairs or insertions of genetic material at the cut site facilitated by the cell's natural DNA repair mechanisms. Coupled with recent advances, including a greater understanding of genetic diseases and maturation of gene therapy and associated delivery technologies, the development of gene editing tools that can permanently and precisely edit DNA may enable the development of therapies that can address, and potentially cure, the cause of DNA-based diseases.

Accordingly, we believe that gene editing has the potential to treat a broad range of diseases not adequately addressed by more traditional therapeutic modalities such as small molecules and biologics. Given its permanent effects on the target DNA in question, gene editing could potentially cure a disease with a single treatment course as opposed to the multi-treatment or chronic dosing regimens often seen with traditional modalities, which typically have transient effects and may require life-long treatment. Additionally, unlike gene therapy, which typically involves introducing a copy of a gene into a patient's cells, gene editing has the potential to make permanent, precise changes directly to the target gene in its normal location, repairing the underlying genetic mutation. This attribute may provide a significant competitive edge over gene therapy, as gene editing can yield a result close to or identical to the normal biological system in addition to addressing a broader spectrum of diseases.

Earlier-generation gene editing methods such as zinc finger nucleases (ZFNs) and transcription activator-like effector nucleases (TALENs) use pairs of synthetic proteins engineered to recognize specific DNA sequences. While these systems have contributed to the clinical development and regulatory pathway for gene editing therapies, their development is relatively complex and costly because each synthetic protein may have variable cleavage activity and can be challenging and time consuming to manufacture because both proteins in the pair must be redesigned for each new target DNA sequence.

About CRISPR/Cas9

One of our co-founders, Dr. Rodolphe Barrangou, and other researchers originally characterized CRISPR/Cas systems as naturally occurring defense mechanisms in various bacterial species that protect against foreign DNA. In 2012, another one of our co-founders, Dr. Jennifer Doudna, and her colleagues published a paper in the journal *Science* describing the use of CRISPR/Cas9 as a gene editing tool. Following Dr. Doudna's pioneering work, researchers were able to demonstrate the simplicity and versatility of the CRISPR/Cas9 system by quickly applying the system in a variety of contexts to better understand biological mechanisms and investigate disease models, resulting in more than 1,500 published papers since 2012.

Generally, CRISPR/Cas systems include one or more proteins that cleave DNA guided by pieces of RNA that both recognize specific DNA sequences and activate the cleaving activity of the Cas proteins. In the original bacterial systems, arrays of RNA sequences that recognize foreign DNA are sometimes referred to as clustered regularly interspaced short palindromic repeats, or CRISPRs, while certain proteins have been named as numbered CRISPR associated, or Cas, proteins. Currently, the simplest and most versatile type of CRISPR/Cas system uses the Cas9 protein as the DNA cutting enzyme, as described in Dr. Doudna's seminal paper.

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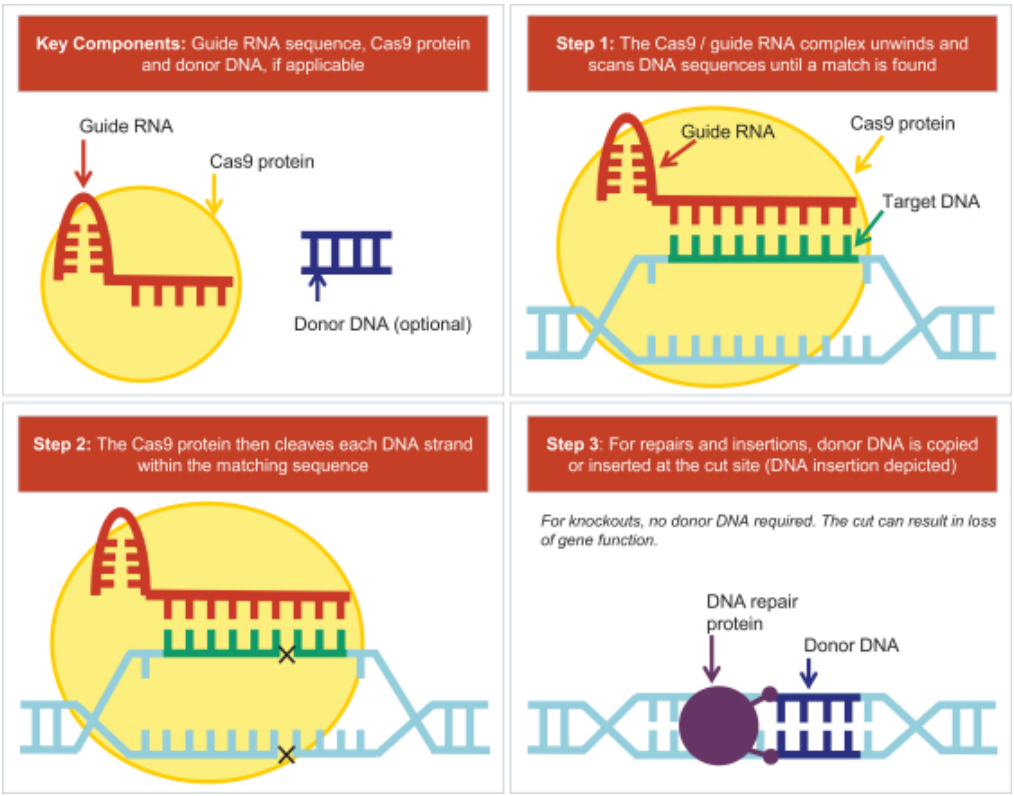
Two basic components of the CRISPR/Cas9 gene editing system are the Cas9 protein and a guide RNA sequence that recognizes and directs the Cas9 to a specific target DNA sequence. The system edits DNA as follows:



Because an RNA sequence complementary to any DNA sequence can be rapidly designed and synthesized, a CRISPR/Cas9 system can be efficiently and specifically reprogrammed by changing only the guide RNA sequence, without any need to modify the cutting protein. The simplicity of programming the CRISPR/Cas9 system, coupled with its efficiency and flexibility, opens the door to a wide range of *in vivo* and *ex vivo* therapeutic applications, including the potential to apply an approach in which multiple genes are edited simultaneously to target more complex multi-gene or polygenic disorders.

We believe that CRISPR/Cas9 offers significant potential benefits over other gene editing methods, including:

- higher selectivity and cleavage efficiency;
- simpler tools allowing for rapid scaling and optimization;
- more efficient path to achieve preclinical proof-of-concept;
- broader applicability to *in vivo* and *ex vivo* therapies;
- greater potential for single curative treatment;
- greater ability to address almost any site in the genomes; and
- ability to target multiple DNA sites simultaneously.

The CRISPR/Cas9 system allows us to make three general types of edits: knockouts, repairs and insertions. Different diseases can be addressed using one or more of these editing strategies, depending on the particular genetic defect and the spectrum of genetic defects within a patient population.

Type of Edit	Description	Mechanism of Action	Example Indications
Knockout	▪ Edits that cause loss of function ▪ Can be applied to genes that make harmful proteins or disease-causing viruses	CRISPR/Cas9 engineered to make: ▪ A single cut in a gene to promote addition or deletion of short pieces of DNA, or two cuts in close proximity to delete a fragment of DNA ▪ As a result, the gene is disrupted and the protein is either not made or is non-functional	▪ Hepatitis B Virus ▪ Alpha-1 Antitrypsin Deficiency ▪ Some Inborn Errors of Metabolism
Repair	▪ Edits that repair disease-associated gene mutation(s) ▪ Can be applied to single point mutation or mutations restricted to a small region of DNA	CRISPR/Cas9 engineered to make: ▪ At least one cut at the target site, delivered with a short, single-stranded DNA donor template containing the correct sequence ▪ Cell repairs DNA break by filling in the gap with the corrected sequence from the donor template ▪ Results in expression of the corrected protein	▪ Alpha-1 Antitrypsin Deficiency ▪ Several Inborn Errors of Metabolism ▪ Cystic Fibrosis
Insertion	▪ Edits that correct a disease-associated gene ▪ Can be applied to insert a functional gene or replace part of a gene where mutations are distributed across a large region of DNA	CRISPR/Cas9 engineered to make: ▪ At least one cut at the target site, delivered with a large, double-stranded DNA donor template containing the correct sequence ▪ Cell repairs DNA break by inserting the donor sequence ▪ Results in expression of the corrected or functional protein	▪ Several Inborn Errors of Metabolism ▪ Cystic Fibrosis

Our Pipeline

To accelerate the development and commercialization of CRISPR/Cas9-based products in multiple therapeutic areas, we are targeting sentinel indications using *in vivo* and *ex vivo* approaches to demonstrate proof-of-concept of the various facets of our technology, including the type of edit and CRISPR/Cas9 selectivity and efficiency. The learnings we gain from each indication will pave the way for rapid expansion of our pipeline by allowing us to target subsequent indications that use the same or analogous delivery vehicles, guide structures and types of edits.

We believe that effective delivery methods will be important for the clinical success of the CRISPR/Cas9 system. Our approach is to undertake a parallel effort on both *in vivo* and *ex vivo* delivery that leverages nearly two decades of research and development in nucleic acid therapeutics and capitalizes on currently available, clinically and preclinically validated technologies, while developing next-generation delivery methods optimized for the CRISPR/Cas9 system.

In Vivo *Pipeline*

Our sentinel *in vivo* indications initially target chronic liver diseases, including HBV, AATD and IEMs. Our initial efforts on *in vivo* delivery focus on the use of LNPs for delivery of the CRISPR/Cas9 complex to the liver. LNPs encapsulate the therapeutic material, providing it with stability, improved pharmacologic properties and controlled circulation time.

We see multiple advantages of using LNPs as our initial *in vivo* delivery vehicles, particularly as optimized by us for delivery of the CRISPR/Cas9 system. Certain LNPs have demonstrated efficacy, safety and favorable tolerability and are currently used as a delivery system for therapeutic small interfering RNA, or siRNA, as well as therapeutic messenger RNA, or mRNA. There are currently several LNP/siRNA programs in the clinic, with the

most advanced in Phase III development. For CRISPR/Cas9-based therapies, where potentially only one or few treatment courses are needed, LNPs have the potential to show a more favorable safety profile when compared to therapeutic modalities like siRNAs where chronic dosing is needed. With our team's expertise in developing LNPs, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans. We are currently evaluating various methods to deliver CRISPR/Cas9 components *in vivo* using LNPs, for example, Cas9 mRNA or Cas9 protein with guide RNA. We expect to have this data in 2016 to determine the optimal path forward.

Hepatitis B Virus Program (Knockout Strategy)

Hepatitis B is an infection of the liver caused by HBV which can progress from acute to chronic infection in approximately 5-10% of infected adults. Chronic HBV can result in long-term health problems, including liver damage, liver failure, liver cancer or even death. Chronic HBV affects approximately 240 million people globally and contributes to an estimated 786,000 deaths each year. In the United States, an estimated 700,000 to 1.4 million persons have chronic HBV, with 2,000 to 4,000 HBV-related deaths per year.

Limitations of Current Treatment Options

There is a clear unmet need for patients with chronic HBV. The current treatment options, which include interferons and nucleos(t)ide analogs, primarily control viral replication but rarely eradicate the virus. Additionally, different genotypes of HBV have variable responses to existing treatments. In the United States, despite the large pool of diagnosed HBV patients, many patients do not receive treatment. Current treatments are typically life-long with risks of long-term side effects.

The persistence of chronic HBV results from a form of the virus that is found in the host nucleus known as cccDNA, which serves as a template for viral replication. It also acts as a reservoir of the virus, which can become reactivated and re-infect that patient. Evidence shows that the presence of cccDNA is a major reason that HBV cannot be eliminated in most patients. There are currently no approved therapies that specifically eradicate cccDNA from infected patients.

Our Solution

We believe that treatment of HBV with a CRISPR/Cas9-based therapeutic has the potential to cure the disease as it could eradicate cccDNA reservoirs with one or a few treatment courses. For this therapeutic program, we intend to use a knockout strategy to destroy or render inactive the copies of HBV cccDNA in infected human cells. This therapy could offer a major improvement over existing treatment options that are life-long and do not cure the disease. We believe it is also possible that a common treatment solution can be developed for all genotypes of HBV because we can target portions of the cccDNA sequences that are the same across genotypes. In addition, there is potential to reduce viral resistance as the virus itself is eradicated.

According to published research studies, CRISPR/Cas9-mediated cuts can significantly reduce intracellular levels of cccDNA when tested *in vitro*. We believe we can use the CRISPR/Cas9 system to help eliminate the reservoirs of cccDNA in infected HBV patients. We intend to evaluate different knockout approaches to eliminate cccDNA *in vivo*, including cleaving the cccDNA in various individual or a combination of locations.

We have completed a bioinformatic analysis of potential CRISPR/Cas9 target sites in the HBV genome to select a set of guide RNAs, including several which can be effective across all HBV genotypes. We identified potential CRISPR/Cas9 target sites by examining the known sequences of HBV isolated from patients. We plan to use a cell line that produces infectious HBV particles as well as cccDNA to identify lead guide RNAs. The lead guide RNAs will then be assessed for their ability to prevent infection and propagation of HBV, and evaluated for off-target effects, in both cell and animal models of HBV. We are commencing *in vitro* proof-of-concept studies using our lead guide RNAs in the near term and expect to complete proof-of-concept studies in an HBV mouse model in 2016.

Clinical Development Pathway

Our expected clinical development path will initially establish evidence of safety and antiviral activity in patients infected with HBV. The key objective of this study will be to show that the therapy can be delivered safely to the patient, with a secondary objective of identifying early indicators of antiviral effect. We expect that the results of our preclinical studies and discussions with the U.S. Food and Drug Administration, or FDA, other global regulatory agencies and the HBV community, will be important for selecting the appropriate patients and endpoints for our clinical trials.

Alpha-1 Antitrypsin Deficiency Program (Knockout and Repair Strategies)

AATD is an inherited genetic disorder that may cause lung or liver disease. The lung disease may result in chronic obstructive pulmonary disease, or COPD, while the liver disease is characterized by inflammation of the liver. In the United States, an estimated 60,000 to 100,000 people have AATD, which is the result of a mutation in the SERPINA1 gene that normally produces secreted alpha-1 antitrypsin, or AAT, protein. AAT is a protease inhibitor that blocks the activity of various enzymes such as neutrophil elastase, which is an enzyme that fights infections, but when not adequately controlled by AAT, can attack normal tissues, such as lung tissue.

The most common form of AATD arises when a patient has a mutation in both copies of the SERPINA1 gene, which causes AAT to aggregate inside liver cells, or hepatocytes, rather than being secreted from the liver. The inability to secrete AAT leaves the lung unprotected from neutrophil elastase and can result in pulmonary disease. The pulmonary consequences of AATD can sometimes culminate in COPD, a progressive disease that causes substantial morbidity and mortality. Estimates suggest that between 1% and 2% of all cases of COPD in the United States have AATD as the underlying cause. In some patients, AAT accumulates in the liver, causing liver inflammation and disease, which leads to liver damage and scarring and, in the most severe cases, liver failure or cancer. Liver disease associated with AATD is diagnosed from infancy to adulthood, whereas lung disease is most common in adult patients.

Limitations of Current Treatment Options

There is currently no cure for AATD. The most common form of treatment for AATD-related lung disease is intravenous augmentation therapy, or plasma protein replacement therapy, where patients are infused with donor plasma proteins enriched for AAT. The goal is to increase the levels of AAT circulating in the body to protect lung tissue from neutrophil elastase. Patients are infused weekly and require life-long treatment. The infused proteins slow, but do not cure, the pulmonary pathology. Existing treatment options also include standard forms of therapy for COPD, such as bronchodilators, anti-inflammatory agents and antibiotics, which only address disease symptoms. None of these treatments address the hepatic form of the disease, where in the most severe cases, liver transplantation may be needed.

Our Solution

We believe that we can apply the CRISPR/Cas9 technology to cure AATD by addressing the defective SERPINA1 gene. We intend to evaluate two editing approaches—a knockout and a repair. Our knockout program for AATD will be best suited for patients with AATD-associated liver disease, as there is currently no effective way to reduce the accumulation of mutated AAT in the liver. With this strategy, we intend to eliminate production of the aberrant form of AAT by knocking out the mutated SERPINA1 gene with a Cas9-mediated cut. We believe this knockout will halt the production and accumulation of AAT in the liver but will not by itself address the lack of AAT circulation that leads to lung disease. Therefore, in this approach, we expect that patients with AATD-associated lung disease will be treated with plasma protein supplementation to achieve levels of the normal form of AAT to be active against the lung disease. Appropriate guide RNA selection will be important for achieving this knockout with high specificity and high efficiency. We have begun discovery efforts for the knockout approach and expect to complete proof-of-concept studies in mouse models in 2016.

We believe our repair approach for AATD will address the lung disease as well as the liver disease. With this strategy, we intend to correct the mutated SERPINA1 gene, which we believe will eliminate production of the aberrant form of AAT and also establish production of the normal protein in the liver. We believe this

correction will reduce or eliminate liver inflammation and increase levels of normal circulating AAT, which should protect the lung from neutrophil elastase, thereby reducing or eliminating the need for plasma protein augmentation therapy. There is preclinical evidence that hepatocytes with normal AAT may possess a growth advantage over those that express the mutated form, suggesting that repair of only a limited number of hepatocytes might be sufficient to address this disease. We expect the progress of this program to follow our AATD knockout program. Depending on the results of our studies and potential development requirements and timelines, we may decide to pursue one or both of our knockout and repair programs in clinical development.

Clinical Development Pathway

For both our knockout and repair strategies, our first in-human studies will take place in a small number of patients with AATD. The key objective of these studies will be to show that the therapy can be delivered safely to the patient. A secondary objective will be to identify early indicators of efficacy, which may include reductions in levels of mutated AAT protein, increases in production of normal circulating AAT protein and the required tests for determining liver and lung function. We will also seek to observe whether we have achieved pre-determined levels of properly functioning AAT in the blood, which has been used historically as a biomarker for approval of augmentation therapy approaches. We expect that the results of our preclinical studies and discussions with the FDA, other global regulatory agencies and the AATD community will be important for selecting the appropriate patients and endpoints for our clinical trials.

Inborn Errors of Metabolism, or IEM, Program (Knockout, Repair and Insertion Strategies)

IEMs span a range of conditions, many severe or fatal, and frequently untreatable. Current treatment options for many IEMs are unsatisfactory and often include bone marrow or liver transplants, which pose the challenge of serious side effects including high risk of mortality in some cases. Individual IEMs are rare disorders, many having an incidence of fewer than 1 in 100,000 births. These diseases typically involve defects in single genes that code for enzymes that facilitate the metabolism of certain cellular components. Errors in these enzymes can result in accumulation of metabolic intermediates that are toxic or interfere with normal biology. We are evaluating a large set of candidate IEMs, including argininosuccinic lyase deficiency, ornithine transcarbamylase deficiency and maple syrup urine disease. Our selection criteria for our initial IEM indications include identifying diseases that originate in the liver, have well-defined mutations that can be addressed by a single knockout, repair or insertion approach, have readily measurable therapeutic endpoints with observable clinical responses, and for which there are no effective treatments. We expect to select a lead IEM indication based on *in vitro* data in 2016.

Ex Vivo *Pipeline*

Our sentinel *ex vivo* programs are in CAR T cell and HSC applications. Under our strategic collaboration with Novartis, our CAR T cell program is exclusive to Novartis. We retain the right to develop and commercialize certain of the HSC programs that we discover with Novartis while others will be proprietary to Novartis. Our *ex vivo* programs will help inform the broader applicability of CRISPR/Cas9 in other relevant types of immune cells, such as NK cells and TILs, in addition to potential applications in other cell types such as induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells.

For our *ex vivo* programs requiring delivery to extracted cells such as HSCs or T cells, we initially plan to deliver the CRISPR/Cas9 complex by electroporation. In parallel with electroporation, we are exploring several newer technologies for delivery to cells *ex vivo*, such as membrane disruption via mechanical forces or modified chemical compositions outside the cells, which may provide advantages in delivery efficiency or cell viability.

CAR T Cell Program

CAR T cell therapies are currently being developed for blood cancers such as acute lymphoblastic leukemia, or ALL, acute myeloid leukemia, multiple myeloma and chronic lymphocytic leukemia. In CAR T cell therapy, naturally-occurring immune cells, specifically T cells, are modified *ex vivo* by inserting a chimeric antigen

receptor, or CAR, into the T cells, thereby activating an immune response against cancer cells. CAR T cell products, including Novartis' CAR T cell candidate, CTL019, have shown clinical promise in addressing hematological malignancies such as ALL. While existing CAR T cell products have shown great clinical promise, they can benefit from the application of CRISPR/Cas9 in multiple ways.

- CRISPR/Cas9 could be used to create a universal donor CAR T cell by knocking out cell surface markers that cause a patient's immune system to recognize another person's cells as foreign. Allowing multiple patients to be treated using cells from a single donor could significantly streamline manufacturing and make CAR T cell therapy more widely accessible.
- CRISPR/Cas9 could be used to modify immune checkpoint pathways, thus enhancing efficacy.
- CRISPR/Cas9 could be used to introduce the CAR into a precise location, as opposed to the current method involving semi-random integration, thus potentially improving the safety profile of the resulting cells.
- CRISPR/Cas9 could be used to knockout one or more of the proteins believed to be responsible for certain serious side effects that can result in dangerously high fevers or severe loss of blood pressure.

We could potentially combine two or more of these approaches to further enhance CAR T cell therapy.

HSC Program

HSCs are the stem cells from which all of the various types of blood cells originate. HSCs can fully repopulate a patient's blood system following transplantation of bone marrow, mobilized peripheral blood or cord blood, which contain HSCs. There are multiple potential opportunities for treating patients using engineered HSCs, including three common classes of blood-related disorders: hemoglobin disorders, such as sickle cell disease and beta thalassemia; primary immune deficiencies, such as X-linked severe combined immunodeficiency, or X-SCID; and bone marrow failures, such as Fanconi anemia. There are limited treatment options available for these types of blood disorders, and available options typically require chronic blood transfusions or bone marrow transplants. These procedures are associated with significant risk, including mortality. We believe the CRISPR/Cas9 system can be used to potentially provide curative benefits by correcting the underlying genetic defect in blood cells of patients with these disorders.

Challenges of developing stem cell products include the relatively low quantity of available cells for treatment and a limited ability to expand HSCs *ex vivo*. We expect to counter these challenges by employing a proprietary small molecule for HSC expansion to which Novartis has granted us rights. This small molecule could allow us to generate large numbers of HSCs for re-implantation in patients after editing. We expect that the application of this technology will improve the performance of the blood cell graft and improve patient outcomes and recovery times as more therapeutic cells can be administered.

We are pursuing a number of potential gene targets and therapeutic indications in collaboration with Novartis. Under our collaboration with Novartis, we and Novartis each have the right to designate a fixed number of HSC therapeutic targets during multiple selection windows, with Novartis having the right of first target selection. Our selection criteria for development programs include, among others, disease severity, existing treatment options, delivery efficiency, the nature of the genetic edit required and the expected performance of cells modified by the procedure.

CAR T Cell and HSC Development Collaboration with Novartis

Under this collaboration, we received an upfront technology access payment from Novartis of $10.0 million and are entitled to an additional $40.0 million, in the aggregate, in additional technology access fees and research payments during the five-year collaboration term, subject to certain credits and adjustments in favor of Novartis. In addition, we are eligible to earn up to $230.3 million in development, regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis for the products developed by Novartis. For more information regarding our ongoing collaboration with Novartis, see the section entitled "—Collaborations—Novartis Institutes for BioMedical Research, Inc." appearing elsewhere in this prospectus for more information.

Future Development Opportunities

We believe our sentinel indications will provide us with broad experience across a variety of gene editing strategies that we can apply to selecting future therapeutic opportunities.

In Vivo

Future indications requiring delivery to tissues in organs beyond the liver will require more research and development work, particularly around generation of new viral delivery vectors. As we progress our sentinel liver programs, we are actively investigating multiple viral delivery vectors that will allow us to explore therapies for indications in these other tissues. One viral vector that we are evaluating, adeno-associated virus, or AAV, is already utilized in a gene therapy product approved in the European Union, or EU. While AAV has enough capacity to deliver a Cas9 protein and guide RNA, a second vector would be required for applications involving a larger DNA repair template. We believe that using a multi-vector system is feasible for effecting more complex repairs; however, we are also exploring alternative viral delivery systems including larger capacity vectors based on adenovirus, lentivirus and herpes simplex virus. In certain cases, these viral vectors can be modified to deliver nucleic acid material to specific cells or tissue types, allowing for customized delivery of CRISPR/Cas9 components to the cells needing repair. Given the variety of possible genetic targets for CRISPR/Cas9, we are currently evaluating the technologies of several academic groups and companies with expertise in each of these vector systems to determine the best delivery vehicle for different therapeutic indications. In choosing a vector for a particular application, we will consider factors including vector size, delivery specificity and efficiency, clinical safety, immunogenicity and manufacturing ability. Internally, we are developing CRISPR/Cas9 components and systems that we believe can be easily adapted to multiple viral vector systems.

One example of a potential future indication in this area is CF. CF is the most common and fatal inherited disease in the western world, associated with over 1,800 different mutations in the gene that encodes the cystic fibrosis transmembrane conductance regulator protein, and affects an estimated 70,000 patients worldwide. While certain mutations are beginning to be addressed by small molecule therapies, there are a large number of mutations for which there is no available therapy. The insertion of a large segment of corrected DNA which spans these mutations has the potential advantage of addressing a majority of these patients with a range of otherwise untreatable genetic mutations with a single therapeutic product. We may seek to advance a gene editing therapy for CF patients by applying the experience we obtain developing insertion edits for IEMs and viral vectors developed to target lung tissue.

Ex Vivo

We expect that our experience in CAR T cells will guide us in building a portfolio of additional *ex vivo* opportunities, enabling us to expand the application of CRISPR/Cas9 for immuno-oncology therapeutics beyond CAR T cells. The field of immuno-oncology is still emerging and rapidly developing. Immunologists continue to gain key insights about the regulation of the immune system, the role of different cell types that elicit the immune response, pathways that govern the survival of cells and methods to manipulate cells for therapeutic purposes. We plan to apply this information to further expand our efforts in oncology.

We believe that we can further apply the experience we gain in immuno-oncology to autoimmune diseases, which result from the immune system recognizing a patient’s own cells or proteins as foreign to the body. Autoimmune diseases can arise when Tregs have insufficient activity. Gene editing may be used to increase the activity of Tregs by targeting certain regulatory proteins.

While our initial focus is on CAR T cells and HSCs, we plan to explore other cell types where we believe we can effectively apply CRISPR/Cas9 technology, such as pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells. We believe that we can apply CRISPR/Cas9 to modify these cells to produce therapeutically relevant proteins for the treatment of systemic disease upon reimplantation of the modified cells into patients. Advances in delivery technologies and CRISPR/Cas9 platform optimizations made through our sentinel *ex vivo* programs will facilitate development of any of these subsequent programs.

Collaborations

To accelerate the development and commercialization of CRISPR/Cas9-based products in multiple therapeutic areas, we have formed, and intend to seek other opportunities to form, strategic alliances with collaborators who can augment our leadership in CRISPR/Cas9 therapeutic development.

Novartis Institutes for BioMedical Research, Inc.

In December 2014, we entered into a strategic collaboration and license agreement with Novartis, focused on the development of new *ex vivo* CRISPR/Cas9-based therapies using CAR T cells and HSCs.

Under the terms of the collaboration, we and Novartis may research potential therapeutic, prophylactic and palliative *ex vivo* applications of our CRISPR/Cas9 platform in HSCs and CAR T cells. The collaboration is also governed by research plans for each of the HSC and CAR T cell programs that outline the parties' responsibilities under, anticipated timelines of and budgets for the programs, and is overseen by a joint steering committee, or JSC, formed by representatives from us and Novartis. Among other activities, the JSC reviews the collaboration program and forms subcommittees to evaluate and nominate the pool of potential research targets under and approve the research plans for the HSC and CAR T cell programs.

Within the HSC therapeutic space, Novartis may obtain exclusive rights to a limited number of HSC targets, to be chosen by Novartis in multiple selection windows. We have the right to choose a limited number of HSC targets for our exclusive development and commercialization per the specified selection schedule. Following these selections by Novartis and us, Novartis may obtain rights to research an additional limited number of HSC targets on a non-exclusive basis. Novartis is required to use commercially reasonable efforts to research, develop, and commercialize a specified number HSC products directed to each of their selected HSC targets.

We have also agreed to collaborate with Novartis on research activities for CAR T cell targets pursuant to the CAR T cell program research plan approved by the CAR T cell subcommittee of the JSC. After completion of the research activities contemplated by the CAR T cell program research plan, Novartis will assume sole responsibility for developing any products arising from that research plan and the costs and expenses of developing, manufacturing and commercializing selected research targets. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one CAR T cell product directed to each of the selected CAR T cell targets.

In the last two years of the five-year collaboration term, Novartis will have the option to select a limited number of targets for research, development and commercialization of *in vivo* therapies using our CRISPR/Cas9 platform, on a non-exclusive basis. Following Novartis' selection of each *in vivo* target, Novartis may offer us the right to participate in the research and development of such targets, in which case an *in vivo* program research plan for such target will be entered into between us and Novartis. Novartis is required to use commercially reasonable efforts to research, develop and commercialize at least one *in vivo* product directed to each of their selected *in vivo* targets. Novartis' *in vivo* target selections are subject to certain restrictions, including that the targets, or all targets within a limited number of organs: (i) have not already been reserved by us pursuant to our limited right to do so under the agreement; (ii) are not the subject of an existing out-license of our CRISPR/Cas9 platform to a third party; and (iii) are not the subject of ongoing or planned research and development by us.

During the collaboration term, with respect to the HSC and CAR T cell programs, and for as long as the applicable party continues to use commercially reasonable efforts to research, develop and commercialize the HSC, CAR T cell and *in vivo* products contemplated by the agreement, neither party may collaborate with a third party with regard to the activities contemplated by the HSC, CAR T cell or *in vivo* programs nor grant licenses to practice such party's intellectual property licensed under the agreement in the selected HSC or CAR T cell or *in vivo* field to a third party.

Under the agreement, we received an upfront technology access payment of $10.0 million and are entitled to an additional $40.0 million, in the aggregate, in additional technology access fees and research payments during the five-year collaboration term. In addition, we are eligible to earn up to $230.3 million in development,

regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis for the products developed by Novartis.

We granted to Novartis a license to our CRISPR/Cas9 platform technology and Novartis granted us a non-exclusive license to its small molecule for HSC expansion and to its LNP platform technology for the purposes of performing activities contemplated by the collaboration. Our license grant to Novartis of our CRISPR/Cas9 platform technology, including a sublicense to certain platform rights licensed from Caribou, is exclusive in the HSC, CAR T cell and *in vivo* fields with respect to each target selected by Novartis pursuant to the agreement and the research plan as long as Novartis continues to use commercially reasonable efforts to research, develop, and commercialize products directed to such targets. Upon the expiration of the collaboration term, Novartis shall have the option to access and obtain a non-exclusive license to our CRISPR/Cas9 platform technology to research, develop and commercialize potential therapeutic, prophylactic and palliative products and services for a limited number of certain approved targets selected by Novartis, exercisable upon written notice to us within a specified time after the expiration of the collaboration term. Such approved targets are subject to certain restrictions, including that the targets may not have been already reserved by us pursuant to our limited right to do so under the agreement, may not be the subject of an existing out license of our CRISPR/Cas9 platform to a third party and may not be the subject of ongoing or planned research and development by us. This non-exclusive license will have a term of five years commencing upon the completion of the technology transfer by us enabling Novartis to practice such licensed rights, and Novartis may not select more than a specified number of approved targets in each year of this license term.

Intellectual property developed out of the collaboration related to our CRISPR/Cas9 platform will be owned solely by us, while all other intellectual property developed out of the collaboration, including intellectual property covering products arising from the collaboration, will be jointly owned by us and Novartis.

The collaboration term ends in December 2019. The term of the agreement expires on the later of (i) the expiration of Novartis' payment obligations under the agreement and (ii) the date of expiration of the last-to-expire of the patent rights licensed to us or Novartis under the agreement. We may terminate the agreement if Novartis or its affiliates institute a patent challenge against our intellectual property rights, and all improvements thereto, licensed to Novartis under the agreement. Novartis may terminate the agreement, without cause, upon 90 days' written notice to us subject to certain conditions, including its payment of any accrued and future obligations as if the collaboration had continued through December 2019. Novartis may terminate the agreement if (1) neither the European Patent Office nor the patent authorities in France, Germany, Italy, Spain or the United Kingdom grants any claim from a patent application claiming priority to any of the specified provisionals by December 31, 2017, or (2) the owners or licensees of U.S. patent 8,697,359 bring a suit against Novartis on or before December 31, 2017 claiming that the activities specifically contemplated by the collaboration research plans infringe an independent claim of such patent. Either party may terminate the agreement in the event of the other party's uncured material breach or bankruptcy—or insolvency-related events.

Potential Future Collaborations

We view strategic partnerships as important drivers for helping accelerate our goal of rapidly treating patients. The potential application of CRISPR/Cas9 is extremely broad, and we plan to continue to identify partners who can contribute meaningful resources and insights to our programs and allow us to more rapidly expand our impact to broader patient populations. In forming these partnerships, we believe we will be able to more rapidly expand our impact to broader patient populations.

Intellectual Property

We believe we are well positioned in terms of our intellectual property because we:

- have built, and intend to expand, a broad worldwide portfolio of intellectual property in areas relevant to the development and commercialization of human therapeutic products using CRISPR/Cas9 technology;
- protect our intellectual property by maintaining trade secrets relating to our proprietary technology innovations and know-how; and

- intend to take additional steps, where appropriate, to further protect our intellectual property rights, including, for example, through the use of copyright protection and regulatory protection available via orphan drug designations, data exclusivity, market exclusivity, and patent term extensions.

Our licensed patent portfolio encompasses foundational filings on the use of CRISPR/Cas9 systems for gene editing, improvement modifications of these CRISPR systems, LNP technologies for delivering protein/nucleic acid complexes and RNA into cells, and cell expansion technology relevant to stem cell-based therapies. We access these patent estates through licenses from Caribou Biosciences, Inc., or Caribou, and Novartis. We also actively apply for, maintain, and plan to defend and enforce, as needed, our internally developed and externally licensed patent rights. Furthermore, we continue to search for and evaluate opportunities to in-license intellectual property relevant to our targeted therapeutic programs and to develop and acquire new intellectual property in collaboration with third parties.

Our portfolio of patent rights includes the following:

Caribou Biosciences In-Licensed Intellectual Property

In July 2014, we entered into a license agreement with Caribou for an exclusive, worldwide, royalty-free license for human therapeutic, prophylactic, and palliative uses, except for anti-fungal and anti-microbial uses, of any CRISPR/Cas9-related patents and applications owned, controlled or licensed by Caribou as well as companion diagnostics to our product or product candidates. The license agreement also includes any CRISPR/Cas9-related intellectual property developed by Caribou between July 16, 2014 and, at least, July 16, 2016 for our field of use. The agreement further includes a non-exclusive research license to conduct research and development on product candidates and products. The Caribou licensed patent portfolio includes several U.S. and foreign patents and patent applications. We have the right to grant sublicenses to the Caribou licensed patent portfolio to third parties in our field of use. Caribou retains the right to practice the licensed intellectual property in all other fields, including for its own specific therapeutics purposes, provided it does not pertain to the application of CRISPR/Cas9 technology to the development of products in our field of use.

Pursuant to a services agreement entered into with Caribou in parallel with the license agreement, we are also receiving two years of research and development services from Caribou. Under the services agreement's research plan, Caribou primarily focuses on the improvement and further development of the CRISPR/Cas9 system and its components. Any intellectual property developed under the services agreement is owned by Caribou and is included in, and subject to the terms of, our license agreement with Caribou.

In relation to our founding, we issued Caribou 8,110,599 shares of our junior preferred stock. We are paying Caribou $5.0 million over the term of the two-year services agreement; and have agreed to pay 30.0% of Caribou's patent prosecution, filing, and maintenance costs for the intellectual property included in the license agreement. We also granted Caribou an exclusive, royalty-free, worldwide license, with the right to sublicense, to any CRISPR/Cas9 patents, patent applications and know-how in Caribou's retained fields of use owned or developed by us between July 16, 2014 and, at least, July 16, 2016. Caribou, which is obligated to pay a portion of our patent filing, prosecution and maintenance costs for any such licensed intellectual property, also has an option to sublicense any CRISPR/Cas9 intellectual property in-licensed by us for uses and activities in its retained field of use.

The Caribou license agreement grants us sublicenses in our field of use to intellectual property in-licensed by Caribou from The Regents of the University of California and the University of Vienna, as well as intellectual property from Wageningen University. Further, under the license agreement, we have an option to sublicense for our field of use any new intellectual property in-licensed by Caribou through, at least, July 16, 2016. In July 2015, we exercised our option to sublicense a portfolio in-licensed by Caribou from Pioneer Hi-Bred International, according to the terms described below.

The term of the Caribou license is until the expiration of the last-to-expire patent right that is licensed to either party. We must use commercially reasonable and diligent efforts to research, develop, manufacture and commercialize at least one product. Either party may terminate the agreement in the event of the other party's

uncured material breach, bankruptcy or insolvency-related events, or breach of its obligations with respect to the included in-licenses. The license agreement with Caribou also gives us access, in our field of use, to Caribou internally developed IP. Since March 2013, Caribou has filed over 40 patent applications in the United States and internationally that relate to the CRISPR/Cas platform, including modified and improved CRISPR/Cas9 systems or components, and methods of use. We cannot ensure that these applications will lead to issued claims that cover our products or activities. Any patents that grant from these applications will expire in or after 2034, assuming payment of necessary maintenance fees.

The Regents of the University of California and the University of Vienna IP

The Regents of the University of California and the University of Vienna, which we collectively refer to as UC/Vienna, co-own a worldwide patent portfolio with Dr. Emanuelle Charpentier that covers an engineered CRISPR/Cas9 system for, among other things, cleaving or editing DNA and altering gene product expression, in non-bacterial organisms, including humans. We refer to this co-owned worldwide patent portfolio as the UC/Vienna/Charpentier patent application. The earliest claimed priority date for this patent family is May 25, 2012. Any patents that ultimately issue from this family and are appropriately maintained will expire in or after 2033.

Caribou entered into an exclusive, worldwide license in all fields, with the right to sublicense, for this patent family with UC/Vienna in April 2013 under UC/Vienna ownership rights. Caribou's license remains in effect for the life of the last-to-expire patent or last-to-be-abandoned patent application licensed, whichever is later. Through our license agreement with Caribou, we have an exclusive sublicense to UC/Vienna's interest in this foundational CRISPR/Cas9 patent family for use in human therapeutics, except for anti-fungal and anti-microbial uses. For products covered by this license and their companion diagnostics, we will owe low single-digit royalties on net sales. In addition, we may be subject to milestone payments of $0.1 million upon the first filing of an investigational new drug application, a total of $0.5 million for Phase II and Phase III clinical trials, $0.5 million to $1.0 million for each of the first three approved new drug applications or biologics license applications in the United States, and $0.2 million for each of the first three approved indications in Europe. Caribou has the right to terminate its agreement with UC/Vienna at any time or the agreement may be terminated due to an uncured material breach. We cannot guarantee that Caribou will maintain the UC/Vienna license for its full term. Should the license between Caribou and UC/Vienna be terminated for any reason, any compliant Caribou sublicenses as of the termination date will remain in effect and will be assigned to UC/Vienna in place of Caribou.

On April 13, 2015, UC/Vienna and Dr. Charpentier jointly filed a request with the United States Patent and Trademarks Office, or USPTO, asking that an interference be declared between the UC/Vienna/Charpentier patent application and certain patents issued to the Broad Institute and Massachusetts Institute of Technology, which we collectively refer to as the Broad, that claim aspects of CRISPR/Cas9 systems and methods to edit genes in eukaryotic cells, including human cells. The Broad patents include, for example, US 8,697,359, issued on April 15, 2014. The earliest claimed priority date for the Broad patents is December 12, 2012. If an interference proceeding is declared, the USPTO will determine whether the contested inventions belong either to UC/Vienna and Dr. Charpentier or to the Broad. The USPTO Board of Patent Appeals and Interference could take up to 24 months or more to render a final decision, and its decision may subsequently be appealed to the U.S. Court of Appeals for the Federal Circuit. We cannot guarantee that UC/Vienna and Dr. Charpentier will prevail in an interference proceeding or obtain issued claims generally covering the use of the CRISPR/Cas9 gene editing system in humans.

Pioneer Hi-Bred International (DuPont Company) IP

Pioneer Hi-Bred and its affiliates, including the DuPont Company, have exclusively licensed to Caribou on a worldwide basis various patent families relating to CRISPR/Cas generally and CRISPR/Cas9 specifically in certain fields, which include Intellia's field of use under our license agreement with Caribou. In July 2015, we exercised our option under the license agreement with Caribou to exclusively sublicense these Pioneer patent families in our field of use.

The sublicense is worldwide, exclusive and royalty-free, with a one-time $0.6 million aggregate milestone payment for activities through Phase III clinical trials for a first therapeutic product, $0.5 million to $1.0 million for each of the first three new drug applications or biologics license applications filed, and up to four payments of $5.0 million for the first four products that exceed $250.0 million in worldwide sales in a calendar year. The license from Pioneer to Caribou is currently exclusive. Pioneer may, at its option, convert the license to non-exclusive on or after April 1, 2016, if certain events have not happened by that time. These events are not within our control and there is no certainty that the events will occur prior to April 1, 2016 or, even if the events have not occurred, if or when Pioneer will exercise its option to convert the license to non-exclusive.

The licensed Pioneer portfolio includes a family of applications filed by Vilnius University that discloses the components of a CRISPR/Cas9 system required for gene editing in non-bacterial organisms. Any patents obtained from this family will expire in or after 2033, assuming payment of necessary maintenance fees. We cannot ensure that these applications will lead to issued claims that cover our products or activities.

Wageningen University IP

Our license agreement with Caribou also includes exclusive access to a patent family from the Wageningen University relating to CRISPR/Cas systems. The family claims priority to a December 30, 2011 application, which discloses various Cas proteins and CRISPR/Cas systems. If we develop and sell a product covered by issued patents in this family, we will owe low single-digit royalties on net sales. We cannot be certain whether patents will issue from these applications that cover our products.

Novartis In-Licensed Intellectual Property

Our December 2014 strategic collaboration and license agreement with Novartis grants us worldwide, non-exclusive, royalty-free rights to a portfolio of 14 Novartis patent families relating to LNPs and modified nucleic acids. The license permits us to use the Novartis LNPs to develop therapeutic, prophylactic, and palliative CRISPR-based *in vivo* products. The earliest claimed priority dates for the licensed patent families range from December 2009 through June 2013, and accordingly will expire by or after December 2030. The term of the license continues until the expiration of the last-to-expire patent right that is licensed to either party. If we attempt to challenge any of the patents in the licensed families, Novartis may terminate the license on a patent-by-patent basis. We cannot guarantee that our products or delivery methods will be covered by issued claims in these families.

In addition, Novartis has also granted us rights to use its proprietary small molecule for HSC expansion. Our rights to this technology are subject to a single-digit royalty based on whether we develop and commercialize the relevant product solely or in collaboration with another third party.

Under our agreement with Novartis, any platform intellectual property developed as part of the collaboration is owned solely by us, while all other intellectual property developed out of the collaboration, including product-based intellectual property, is jointly owned by us and Novartis. We cannot guarantee that intellectual property filed based on collaboration data will result in issued claims covering our products or delivery methods. Under our agreement with Novartis, we have also granted Novartis a sublicense to the intellectual property we license under our agreement with Caribou for the Novartis-selected HSC and CAR T cells products, and *in vivo* products if applicable, with such sublicense being exclusive as long as Novartis uses commercially reasonable efforts to develop and commercialize those products.

Manufacturing

We currently have no commercial manufacturing or cell processing capabilities. We plan to rely on qualified third-party organizations to produce or process bulk compounds, formulated compounds, viral vectors or engineered cells for IND-supporting activities and early stage clinical trials. We expect that commercial quantities of any compound, vector, or engineered cells that we may seek to develop will be manufactured in facilities and by processes that comply with FDA and other regulations. At the appropriate time in the product development process, we will determine whether to establish manufacturing facilities or continue to rely on third parties to manufacture commercial quantities of any products that we may successfully develop.

Competition

The biotechnology industry is extremely competitive in the race to develop new products. While we believe we have significant competitive advantages with our industry-leading expertise in gene editing, clinical development expertise and dominant intellectual property position, we currently face and will continue to face competition for our development programs from companies that use gene editing or gene therapy development platforms and from companies focused on more traditional therapeutic modalities such as small molecules and antibodies. The competition is likely to come from multiple sources, including larger pharmaceutical companies, biotechnology companies and academia. Many of these competitors may have access to greater capital and resources than us. For any products that we may ultimately commercialize, not only will we compete with any existing therapies and those therapies currently in development, we will have to compete with new therapies that may become available in the future.

Competitors in our efforts to provide genetic therapies to patients can be grouped into at least three sets based on their product discovery platforms:

- gene editing companies focused on CRISPR/Cas9 including: CRISPR Therapeutics, Inc., Editas Medicine, Inc. and Tracr Hematology Limited;
- other gene editing companies including: bluebird bio, Inc., Cellectis S.A., Poseida, Inc., Precision BioSciences, Inc., and Sangamo BioSciences, and
- gene therapy companies developing *ex vivo* therapies including: bluebird bio, Inc., Cellectis S.A., and Juno Therapeutics, Inc.

Our competitors will also include companies that are or will be developing small molecules, biologics and nucleic acid based therapies for the same indications that we are targeting with our CRISPR/Cas9-based therapeutics.

Government Regulation and Product Approval

We are subject to extensive regulation. We expect our future product candidates to be regulated as biologics. Biological products are subject to regulation under the Federal Food, Drug, and Cosmetic Act, or FD&C Act, and the Public Health Service Act, or PHS Act, and other federal, state, local and foreign statutes and regulations. Both the FD&C Act and the PHS Act and their corresponding regulations govern, among other things, the testing, manufacturing, safety, efficacy, labeling, packaging, storage, record keeping, distribution, reporting, advertising and other promotional practices involving biological products. Before clinical testing of biological products in the United States may begin, we must submit an investigational new drug application, or IND, to the FDA, which reviews the clinical protocol, and the IND must become effective before clinical trials may begin. In some instances, we must also submit our protocols to the National Institutes of Health, or NIH, through its Recombinant DNA Advisory Committee, or RAC, for review before initiating clinical testing.

Biologic products must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agencies before they may be legally marketed in foreign countries. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources and we may not be able to obtain the required regulatory approvals.

Within the FDA, the Center for Biologics Evaluation and Research, or CBER, regulates biologic products. Proposed human clinical trials involving nucleic acid transfer conducted at, or sponsored by, institutions receiving NIH funding for research with recombinant or synthetic nucleic acid molecules are also subject to review by the NIH RAC. Moreover, certain therapeutic protocols that raise important scientific, safety, medical, ethical, or social issues are discussed at the RAC's quarterly public meetings. While the FDA has not provided specific guidance on gene editing in humans, it has published guidance documents related to, among other things, gene therapy products in general, their preclinical assessment, observing subjects involved in gene therapy clinical trials for delayed adverse events, potency testing, and chemistry, manufacturing and control information in gene therapy INDs.

Although the FDA has not yet approved any human gene therapy product for sale, it has provided guidance for the development of gene therapy products which may be relevant to gene editing products as well. For example, the FDA has established the Office of Cellular, Tissue and Gene Therapies, or OCTGT, within CBER, to consolidate the review of gene therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee, or CTGTAC, to advise CBER on its reviews. In addition, the FDA has issued a growing body of clinical guidelines, chemistry, manufacturing and control, or CMC, guidelines and other guidelines, all of which are intended to facilitate industry's development of gene therapy products. In 2012, the European Medicines Agency approved a gene therapy product called Glybera, which is the first gene therapy product approved by regulatory authorities anywhere in the Western world.

Ethical, social and legal concerns about gene-editing technology, gene therapy, genetic testing and genetic research could result in additional regulations restricting or prohibiting the processes we may use. Federal and state agencies, congressional committees and foreign governments have expressed interest in further regulating biotechnology. More restrictive regulations or claims that our products are unsafe or pose a hazard could prevent us from commercializing any product candidates. New government requirements may be established that could delay or prevent regulatory approval of our product candidates under development. It is impossible to predict whether legislative changes will be enacted, regulations, policies or guidance changed, or interpretations by agencies or courts changed, or what the impact of such changes, if any, may be.

U.S. Biological Products Development Process

The FDA approves biologics through the Biologics License Application, or BLA, process before they may be legally marketed in the United States. This process generally involves the following:

- completion of extensive nonclinical, sometimes referred to as preclinical laboratory tests, and preclinical animal studies and applicable requirements for the humane use of laboratory animals and formulation studies in accordance with applicable regulations, including good laboratory practices, or GLPs;
- submission to the FDA of an IND application, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as good clinical practices, or GCPs, and any additional requirements for the protection of human research subjects and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;
- submission to the FDA of a BLA for marketing approval that includes substantive evidence of safety, purity, and potency from results of nonclinical testing and clinical trials;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the biological product is produced to assess compliance with current Good Manufacturing Practices, or cGMPs, to assure that the facilities, methods and controls are adequate to preserve the biological product's identity, strength, quality and purity and, if applicable, the FDA's current good tissue practices, or cGTPs, for the use of human cellular and tissue products;
- positive results from potential FDA audit of the nonclinical study and clinical trial sites that generated the data in support of the BLA; and
- FDA review and approval, or licensure, of the BLA.

Before testing any biological product candidate in humans, the product candidate enters the preclinical testing stage. Preclinical tests, also referred to as nonclinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the product candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLPs.

Where a study involving the transfer of nucleic acids into humans is conducted at, or sponsored by, institutions receiving NIH funding for recombinant DNA research or synthetic nucleic acid molecules, prior to the submission of an IND to the FDA, a protocol and related documentation is submitted to and the study is registered with the NIH Office of Biotechnology Activities, or OBA, pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines. Compliance with the NIH Guidelines is mandatory for investigators at institutions receiving NIH funds for research involving recombinant DNA, however many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. The NIH is responsible for convening the RAC, a federal advisory committee that reviews research proposals involving human-gene transfer research and discusses, if needed, protocols that raise novel or particularly important scientific, safety or ethical considerations at one of its quarterly public meetings. The RAC decides whether a protocol raises issues that warrant further discussion at its quarterly meetings, and the OBA will notify the FDA of the RAC's decision regarding the necessity for full public review of a particular protocol. RAC proceedings and reports are posted to the OBA web site and may be accessed by the public.

The clinical trial sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA places the clinical trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. With gene therapy protocols, if the FDA allows the IND to proceed, but the RAC decides that full public review of the protocol is warranted, the FDA will request at the completion of its IND review that sponsors delay initiation of the protocol until after completion of the RAC review process. The FDA may also impose clinical holds on a biological product candidate at any time before or during clinical trials due to, among other reasons, safety concerns or non-compliance with regulatory requirements. If the FDA imposes a clinical hold, trials may not recommence without FDA authorization and then only under terms authorized by the FDA. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials.

Clinical trials involve the administration of the biological product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the study sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research subjects provide informed consent. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of study participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Certain clinical trials also must be reviewed by an institutional biosafety committee, or IBC, a local institutional committee that reviews and all forms of research conducted at that institution involving recombinant or synthetic nucleic acid molecules. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment and ensures that all research is conducted in compliance with NIH Guidelines.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase I. The biological product candidate is initially introduced into healthy human subjects and tested for safety. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

- Phase II. The biological product candidate is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- Phase III. Clinical trials are undertaken to further evaluate dosage, clinical efficacy, potency, and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product approval and labeling.

Post-approval clinical trials, sometimes referred to as Phase IV clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up. The FDA recommends that sponsors observe subjects for potential gene therapy-related delayed adverse events for a 15-year period, including a minimum of five years of annual examinations followed by ten years of annual queries, either in person or by questionnaire.

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 results of the clinical trials must be submitted to the FDA. Written IND safety reports must be promptly submitted to the FDA, the NIH and the investigators for serious and unexpected adverse events, any findings from other trials, tests in laboratory animals or *in vitro* testing that suggest a significant risk for human subjects, or any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. Phase I, Phase II and Phase III clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor or its data safety monitoring board may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biological product candidate has been associated with unexpected serious harm to patients.

There are also requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Sponsors of certain clinical trials of FDA-regulated products, including biologics, are required to register and disclose certain clinical trial information, which is publicly available at www.clinicaltrials.gov. Information related to the product, patient population, phase of investigation, study sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to discuss the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved.

Human therapeutic products based on gene-editing technology are a new category of therapeutics. Because this is a relatively new and expanding area of novel therapeutic interventions, there can be no assurance as to the length of the study period, the number of patients the FDA will require to be enrolled in the trials in order to establish the safety, purity and potency of human gene editing products, or that the data generated in these trials will be acceptable to the FDA to support marketing approval. The NIH and the FDA have a publicly accessible database, the Genetic Modification Clinical Research Information System, which includes information on gene transfer trials and serves as an electronic tool to facilitate the reporting and analysis of adverse events in these trials.

Concurrent with clinical trials, companies usually complete additional animal trials and must also develop additional information about the physical characteristics of the biological product candidate as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHS Act emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and

purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Processes

After the completion of clinical trials of a biological product candidate, FDA approval of a BLA must be obtained before commercial marketing of the biological product. The BLA must include results of product development, laboratory and animal trials, human trials, information on the manufacture and composition of the product, proposed labeling and other relevant information. In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the biological 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 is safe and effective. The Food and Drug Administration Safety and Innovation Act, or FDASIA, requires that a sponsor who is planning to submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within sixty days after an end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. The initial PSP must include, among other things, an outline of the pediatric study or studies that the sponsor plans 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 the sponsor must reach agreement on the PSP. A sponsor 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 grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any biological product for an indication for which orphan designation has been granted. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the BLA for filing and, even if filed, that any approval will be granted on a timely basis, if at all.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each BLA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. According to the FDA's fee schedule, effective through September 30, 2015, the user fee for an application requiring clinical data, such as a BLA, is $2,335,200. PDUFA also imposes an annual product fee for biologics ($110,370) and an annual establishment fee ($569,200) on facilities used to manufacture prescription biologics. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Within 60 days following submission of the application, the FDA reviews a BLA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the BLA. The FDA reviews the BLA to determine, among other things, whether the proposed product is safe and potent, or effective, for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with cGMP requirements to assure and preserve the product's identity, safety, strength, quality, potency and purity. The FDA may refer applications for novel biological products or biological products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and 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. During the biological product approval process, the FDA also will determine whether a Risk

Evaluation and Mitigation Strategy, or REMS, is necessary to assure the safe use of the biological product candidate. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS; the FDA will not approve the BLA without a REMS, if required.

Before approving a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP and, if applicable, cGTP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with IND study requirements and cGCP requirements. To assure cGMP, cGTP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, record keeping, production, and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the BLA does not satisfy its regulatory criteria for approval and deny approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data. If the agency decides not to approve the BLA in its present form, the FDA will issue a complete response letter that usually describes all of the specific deficiencies in the BLA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, challenge the determination set forth in the letter by requesting a hearing or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. The FDA may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a REMS, or otherwise limit the scope of any approval. In addition, the FDA may require post marketing clinical trials, sometimes referred to as Phase IV clinical trials, designed to further assess a biological product's safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized.

One of the performance goals agreed to by the FDA under the PDUFA is to review 90% of standard BLAs in 10 months from the filing date and 90% of priority BLAs in six months from the filing date, whereupon a review decision is to be made. The FDA does not always meet its PDUFA goal dates for standard and priority BLAs and its review goals are subject to change from time to time. The review process and the PDUFA goal date may be extended by three months if the FDA requests or the BLA sponsor otherwise provides additional information or clarification regarding information already provided in the submission within the last three months before the PDUFA goal date.

Orphan Drug Designation

The FDA may grant Orphan Drug Designation to drugs intended to treat a rare disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and marketing the drug for this type of disease or condition will be recovered from sales in the United States. Orphan product designation must be requested before submitting a BLA. After the FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process

In the United States, Orphan Drug Designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product receives the first FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug

for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity or where the manufacturer with orphan exclusivity is unable to assure sufficient quantities of the approved orphan designated product. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity and then used off-label. Orphan product exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same biological product as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease. If a drug or biological product 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.

Expedited Development and Review Programs

The FDA has a Fast Track program that is intended to expedite or facilitate the process for reviewing new biological products that meet certain criteria. Specifically, new biological products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a new biologic may request that the FDA designate the biologic as a Fast Track product at any time during the clinical development of the product, but ideally not later than the pre-BLA meeting. The FDA may consider for review sections of the marketing application for a Fast Track product on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept sections of the application and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application.

Any product submitted to the FDA for marketing, including under a Fast Track program, may be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. Any product is eligible for priority review if it treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness of the treatment, prevention, or diagnosis of that condition. The FDA will attempt to direct additional resources to the evaluation of an application for a new biological product designated for priority review in an effort to facilitate the review. Additionally, a product may be eligible for accelerated approval. Biological products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may be eligible for accelerated approval, which means that they may be approved on the basis of adequate and well-controlled clinical trials establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a biological product subject to accelerated approval perform adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. Fast Track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

In addition, under the provisions of the Food and Drug Administration Safety and Innovation Act of 2012, or FDASIA, the FDA established a Breakthrough Therapy Designation, which is intended to expedite the development and review of products that treat serious or life-threatening diseases or conditions. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug 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 designation includes all of the features of Fast Track designation, as well as more intensive FDA interaction and guidance. The Breakthrough Therapy Designation is a distinct status from both accelerated approval and priority review, but these can also be

granted to the same product candidate if the relevant criteria are met. The FDA must take certain actions, such as holding timely meetings and providing advice, intended to expedite the development and review of an application for approval of a breakthrough therapy. All requests for breakthrough therapy designation will be reviewed within 60 days of receipt, and FDA will either grant or deny the request.

Fast Track designation, priority review, accelerated approval and breakthrough therapy designation do not change the standards for approval but may expedite the development or approval process. Where applicable, we plan to request Fast Track and Breakthrough Therapy Designation for our product candidates. Even if we receive one or both of these designations for our product candidates, the FDA may later decide that our product candidates no longer meets the conditions for qualification. In addition, these designations may not provide us with a material commercial advantage.

Post-Approval Requirements

Maintaining substantial compliance with applicable federal, state, and local statutes and regulations requires the expenditure of substantial time and financial resources. Rigorous and extensive FDA regulation of biological products continues after approval, particularly with respect to cGMP requirements. We will rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of any products that we may commercialize. Manufacturers of our products are required to comply with applicable requirements in the cGMP regulations, including quality control and quality assurance and maintenance of records and documentation. Other post-approval requirements applicable to biological products, include reporting of cGMP deviations that may affect the identity, potency, purity and overall safety of a distributed product, record-keeping requirements, reporting of adverse effects, reporting updated safety and efficacy information, and complying with electronic record and signature requirements. After a BLA is approved, the product also may be subject to official lot release. As part of the manufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of each lot of product to the FDA 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. The FDA also may perform certain confirmatory tests on lots of some products, such as viral vaccines, before releasing the lots for distribution by the manufacturer. In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, purity, potency, and effectiveness of biological products.

We also must comply with the FDA's advertising and promotion requirements, such as those related to direct-to-consumer advertising, the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet and social media platforms. Discovery of previously unknown problems or the failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant or manufacturer to administrative or judicial civil or criminal sanctions and adverse publicity. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, clinical hold, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, mandated corrective advertising or communications with doctors, debarment, restitution, disgorgement of profits, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Biological product manufacturers and other entities involved in the manufacture and distribution of approved biological products are required to register their establishments with the FDA and certain other federal and state agencies, and are subject to periodic unannounced inspections by the FDA and certain other federal and state agencies for compliance with cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product,

manufacturer, or holder of an approved BLA, including withdrawal of the product from the market. In addition, changes to the manufacturing process or facility generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

U.S. Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA plus the time between the submission date of a BLA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved biological product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent within a 60 day period from the date the product is first approved for commercial marketing. The U.S. PTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may intend to apply for restoration of patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA. However, there can be no assurance that any such extension will be granted to us.

Biosimilars and Exclusivity

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, 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. To date, only one biosimilar has been licensed under the BPCIA, although numerous biosimilars have been approved in Europe. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars.

Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical trials or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger, and often more complex, structures of biological products, as well as the processes by which such products are manufactured, pose significant hurdles to implementation of the abbreviated approval pathway that are still being worked out by the FDA.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. "First licensure" typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a biological product if the licensure is for a supplement for the biological product or for a subsequent application by the same sponsor or manufacturer of the biological product (or licensor, predecessor in interest, or other related entity) for a change (not including a modification to the structure of the

biological product) that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength, or for a modification to the structure of the biological product that does not result in a change in safety, purity, or potency. Therefore, one must determine whether a new product includes a modification to the structure of a previously licensed product that results in a change in safety, purity, or potency to assess whether the licensure of the new product is a first licensure that triggers its own period of exclusivity. Whether a subsequent application, if approved, warrants exclusivity as the "first licensure" of a biological product is determined on a case-by-case basis with data submitted by the sponsor.

During the 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing 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 their product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

A biological product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

The BPCIA is complex and only beginning to be interpreted and implemented by the FDA. In addition, recent government proposals have 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.

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, 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. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act, to which we are subject, prohibits corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity.

Government Regulation Outside of the United States

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical studies and any commercial sales and distribution of our products. Because biologically sourced raw materials are subject to unique contamination risks, their use may be restricted in some countries.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical studies or marketing of the

product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical study application much like the IND prior to the commencement of human clinical studies.

The requirements and process governing the conduct of clinical studies, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical studies are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

Similar to the United States, the various phases of pre-clinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the EU, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the Member State regimes. To improve the current system, a new Regulation No. 536/2014 on clinical trials on medicinal product candidates for human use, which will repeal Directive 2001/20/EC, was adopted on April 16, 2014 and published in the European Official Journal on May 27, 2014. The new Regulation aims at harmonizing and streamlining the clinical trials authorization process, simplifying adverse event reporting procedures, improving the supervision of clinical trials, and increasing their transparency. The new Regulation entered into force on June 16, 2014 but will apply not earlier than May 28, 2016. Until then the Clinical Trials Directive 2001/20/EC will continue to apply. In addition, the transitional provisions of the new Regulation offer, under certain conditions, the clinical trial sponsors the possibility to choose between the requirements of the Directive and the Regulation for a limited amount of time.

Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU Member States where the trial is to be conducted by two distinct bodies: the National Competent Authority, or NCA, and one or more Ethics Committees, or ECs. Under the current regime all suspected unexpected serious adverse reactions, or SUSARs, to the investigational product that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

In the EU, gene therapy medicinal products can only be commercialized after obtaining a Community Marketing Authorization, or Community MA. The Community MA is issued by the European Commission through the so-called Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, of the European Medicines Agency, or EMA, and which is valid throughout the entire territory of the EU. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, and medicinal products containing a new active substance indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and viral diseases. The Centralized Procedure is also mandatory for so-called Advance Therapy Medicinal Products (or ATMPs). ATMPs comprise gene therapy, somatic cell and tissue engineered products. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EU as of November 20, 2005, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU.

Under the Centralized Procedure, the CHMP serves as the scientific committee that renders opinions about the safety, efficacy and quality of human products on behalf of the EMA. The CHMP is composed of experts nominated by each Member State’s national drug authority, with one of them appointed to act as Rapporteur for the co-ordination of the evaluation with the possible assistance of a further member of the Committee acting as a Co-Rapporteur. The CHMP has 210 days to adopt an opinion as to whether a marketing authorization should be granted. The process usually takes longer as additional information is requested, which triggers clock-stops in the procedural timelines. Based on the CHMP’s opinion the European Commission will adopt a decision on the granting of the marketing authorization. In case of ATMPs, the EMA’s Committee for Advanced Therapies, a multidisciplinary committee of experts on ATMPs, will prepare a draft opinion that will be submitted to the CHMP before the latter adopts its final opinion. Under the above described procedure, before granting the MA, the EMA makes an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

In the EU, new products authorized for marketing (i.e., reference products) qualify for eight years of data exclusivity and an additional two years of market exclusivity upon marketing authorization. The data exclusivity period prevents generic applicants from relying on the preclinical and clinical trial data contained in the dossier of the reference product when applying for a generic marketing authorization in the EU during a period of eight years from the date on which the reference product was first authorized in the EU. The market exclusivity period prevents a successful generic applicant from commercializing its product in the EU until ten years have elapsed from the initial authorization of the reference product in the EU. The ten-year market exclusivity period can be extended to a maximum of eleven years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications, which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies.

The EU also provides other opportunities for market exclusivity. For example, products receiving orphan designation in the EU can receive ten years of market exclusivity, during which time no similar medicinal product for the same indication may be placed on the market. An orphan product can also obtain an additional two years of market exclusivity in the EU for pediatric studies.

The criteria for designating an "orphan medicinal product" in the European Union are similar in principle to those in the United States. Under Article 3 of Regulation (EC) 141/2000, a medicinal product may be designated as orphan if (1) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the European Union when the application is made, or (b) the product, without the benefits derived from orphan status, would not generate sufficient return in the European Union to justify investment; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the European Union, or if such a method exists, the product will be of significant benefit to those affected by the condition, as defined in Regulation (EC) 847/2000. Orphan medicinal products are eligible for financial incentives such as reduction of fees or fee waivers and are, upon grant of a marketing authorization, entitled to ten years of market exclusivity for the approved therapeutic indication. The application for orphan drug designation must be submitted before the application for marketing authorization. The applicant will receive a fee reduction for the marketing authorization application if the orphan drug designation has been granted, but not if the designation is still pending at the time the marketing authorization is submitted. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The 10-year market exclusivity may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation, for example, if the product is sufficiently profitable not to justify maintenance of market exclusivity. Additionally, marketing authorization may be granted to a similar product for the same indication at any time if:

- The second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior;
- The applicant consents to a second orphan medicinal product application; or
- The applicant cannot supply enough orphan medicinal product.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Other Healthcare Laws

In addition to FDA restrictions on marketing of pharmaceutical and biological products, other U.S. federal and state healthcare regulatory laws restrict business practices in the pharmaceutical industry, which include, but are not limited to, state and federal anti-kickback, false claims, data privacy and security, and physician payment transparency laws.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting, receiving or providing any remuneration, directly or indirectly, overtly or covertly, to induce or in return for purchasing, leasing, ordering, or arranging for or recommending the purchase, lease, or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term "remuneration" has been broadly interpreted to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases, or recommendations may be subject to scrutiny if they do not meet the requirements of a statutory or regulatory exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated.

Additionally, the intent standard under the Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, collectively the Affordable Care Act, to a stricter standard such that 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. In addition, the Affordable Care Act codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act. The majority of states also have anti-kickback laws, which establish similar prohibitions and in some cases may apply to items or services reimbursed by any third-party payor, including commercial insurers.

The federal false claims and civil monetary penalties laws, including the civil False Claims Act, prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. A claim includes "any request or demand" for money or property presented to the U.S. government. Actions under the civil False Claims Act may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Violations of the civil False Claims Act can result in very significant monetary penalties and treble damages. Several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of products for unapproved (e.g., off-label) uses. In addition, the civil monetary penalties statute imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. Many states also have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Given the significant size of actual and potential settlements, it is expected that the government authorities will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the U.S. federal Anti-Kickback Statute, the Affordable Care Act broadened the reach of certain criminal healthcare fraud statutes created under HIPAA by amending the intent

requirement such that 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.

In addition, there has been a recent trend of increased federal and state regulation of payments made to physicians and certain other healthcare providers. The Affordable Care Act imposed, among other things, new annual reporting requirements through the Physician Payment Sunshine Act for covered manufacturers for certain payments and "transfers of value" provided to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Failure to submit timely, accurately and completely the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties of up to an aggregate of $150,000 per year and up to an aggregate of $1 million per year for "knowing failures." Covered manufacturers were required to begin collecting data on August 1, 2013 and submit reports on aggregate payment data to the government for the first reporting period (August 1, 2013 – December 31, 2013) by March 31, 2014, and were required to report detailed payment data for the first reporting period and submit legal attestation to the completeness and accuracy of such data by June 30, 2014. Thereafter, covered manufacturers must submit reports by the 90th day of each subsequent calendar year. In addition, certain states require implementation of compliance programs and compliance with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, impose restrictions on marketing practices, or tracking and reporting of gifts, compensation and other remuneration or items of value provided to physicians and other healthcare professionals and entities.

We may also be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations, including the Final HIPAA Omnibus Rule published on January 25, 2013, impose specified requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities and their business associates. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same requirements, thus complicating compliance efforts.

If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and individual imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

To the extent that any of our product candidates, once approved, are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or other transfers of value to healthcare professionals.

Coverage and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any pharmaceutical or biological product for which we obtain regulatory approval. In the United States and markets in 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 our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. Sales of any products for which we receive regulatory approval for commercial sale will therefore depend, in part, on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations.

The process for determining whether a third-party payor will provide coverage for a pharmaceutical or biological product typically is separate from the process for setting the price of such product or for establishing the reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the FDA-approved products for a particular indication. A decision by a third-party payor not to cover our product candidates could reduce physician utilization of our products once approved and have a material adverse effect on our sales, results of operations and financial condition. Moreover, a third-party payor's decision to provide coverage for a pharmaceutical or biological product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. Additionally, coverage and reimbursement for new products can differ significantly from payor to payor. One third-party payor's decision to cover a particular medical product or service does not ensure that other payors will also provide coverage for the medical product or service, or will provide coverage at an adequate reimbursement rate. As a result, the coverage determination process will require us to provide scientific and clinical support for the use of our products to each payor separately and will be a time-consuming process.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of pharmaceutical or biological products have been a focus in this effort. Third-party payors are increasingly challenging the prices charged for medical products and services, examining the medical necessity and reviewing the cost-effectiveness of pharmaceutical products, biological products, medical devices and medical services, in addition to questioning safety and efficacy. If these third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after FDA approval or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit.

Healthcare Reform

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products. By way of example, in the United States, the Medicare Prescription Drug Improvement and Modernization Act of 2003, or MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for outpatient drug purchases by those covered by Medicare under a new Part D and introduced a new reimbursement methodology based on average sales prices for Medicare Part B physician-administered drugs. As a result of this legislation and the expansion of federal coverage of pharmaceutical products, there is additional pressure to contain and reduce costs. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, and any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors. These cost reduction initiatives and other provisions of the MMA could decrease the coverage and reimbursement that we receive for any approved products, and could seriously harm our business.

In addition, in March 2010, the Affordable Care Act was enacted, which, among other things, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, introduced a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care plans, imposed mandatory discounts for certain Medicare Part D beneficiaries as a condition for manufacturers' outpatient drugs coverage under Medicare Part D, and subjected drug manufacturers to new annual fees based on pharmaceutical companies' share of sales to federal healthcare programs.

On August 2, 2011, the Budget Control Act of 2011 created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This included aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect on April 1, 2013 and will stay in effect through 2024 unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals and imaging centers.

We expect that additional state and federal 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 reduced demand for our products once approved or additional pricing pressures.

Employees

As of August 31, 2015, we had 37 full-time employees, 23 of whom were primarily engaged in research and development activities and 18 of whom have an M.D. or Ph.D. degree.

Facilities

Our headquarters are located in Cambridge, Massachusetts, where we lease approximately 15,200 square feet of office and laboratory space. Our lease expires in January 2020, and we have an option to extend it through January 2025.

Legal Proceedings

We are not currently a party to any material legal proceedings.

Certain of the intellectual property rights licensed to us by Caribou may be subject to a potential patent interference proceeding between UC/Vienna and Emmanuelle Charpentier, on the one hand, and the Broad Institute on the other hand. See the section entitled "Intellectual Property—Caribou Biosciences In-Licensed Intellectual Property—University of California, Berkeley and University of Vienna IP" appearing elsewhere in this prospectus for more information regarding this potential patent interference proceeding.

MANAGEMENT

Executive Officers and Directors

The following table sets forth the name, age and position of each of our executive officers and directors, as of August 31, 2015:

Name	Age	Position
Nessan Bermingham, Ph.D.	42	Founder, President, Chief Executive Officer and Director
Thomas M. Barnes, Ph.D.	55	Chief Scientific Officer
John M. Leonard, M.D.	58	Chief Medical Officer and Director
David V. Morrissey, Ph.D.	57	Chief Technology Officer
José E. Rivera, J.D.	49	Chief Operating Officer and Chief Legal Officer
Sapna Srivastava, Ph.D.	44	Chief Financial and Strategy Officer
Jean-François Formela, M.D.	58	Director
Carl L. Gordon, Ph.D.	49	Director
Rachel Haurwitz, Ph.D.	30	Director

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the nominating and corporate governance committee

Nessan Bermingham, Ph.D., has served as our President, Chief Executive Officer and director since he founded the company in May 2014. Prior to founding Intellia, from 2002 to 2007 and 2012 to 2014 Dr. Bermingham held various positions at Atlas Venture, an early stage venture capital firm focused on investments in biological and drug discovery technologies, most recently as venture partner. From 2007 to 2008, he was a partner at Omega Fund Management, a direct secondary healthcare fund, and from 2009 to 2013, he served as the founder and managing partner of Bio Equity Capital LLC, a healthcare focused special situations firm. Dr. Bermingham was the founding Chief Executive Officer of Tal Medical, a clinical stage medical device company, and sits on the independent advisory board of Merck Serono and sits on the board of directors of Harbor Antibodies. Dr. Bermingham received his B.S. from Queen's University in Belfast, Northern Ireland, a Ph.D. in molecular biology from Imperial College London and was a Howard Hughes Associate Fellow at Baylor College of Medicine. We believe that Dr. Bermingham's detailed knowledge of our company and his over 15 years in the life sciences industry, provide a valuable contribution to our board of directors.

Thomas M. Barnes, Ph.D., has served as our Chief Scientific Officer since October 2014. Prior to joining Intellia, from 2013 to 2014, Dr. Barnes served as Principal at Barnes Consulting, a consulting company he founded, and from April 2009 to 2013, he was Vice President of Discovery at Eleven Biotherapeutics Inc., a biotechnology company. From 2008 to 2009, Dr. Barnes was the chief executive officer of Tengri Therapeutics, Inc., a biotechnology company. From 2004 to 2008, he held positions of increasing responsibility, including Senior Vice President and site head of the drug repositioning division of Ore Pharmaceuticals, Inc., a biopharmaceutical company. Prior to that Dr. Barnes was at Millennium Pharmaceuticals, a biotechnology company in Cambridge, Massachusetts, which is now a wholly owned subsidiary of Takeda Pharmaceutical Company Limited, where he held positions of increasing responsibility, including Director, Genomic Pharmacology from 1997 to 2004. Dr. Barnes received his B.Sc. in genetics from the University of Sydney in Australia, a Ph.D. in genetics from Cambridge University and completed research fellowships at Harvard Medical School and McGill University.

John M. Leonard, M.D., has served as our Chief Medical Officer since July 2014. Prior to joining Intellia, Dr. Leonard was Chief Scientific Officer and Senior Vice President of Research & Development at AbbVie, Inc., or AbbVie, a biopharmaceutical company, from its spin-out from Abbott Laboratories in January 2013 until retiring at the end of 2013. Prior to the formation of AbbVie, from 2008 to 2012, he was Global Head of Pharmaceutical R&D at Abbott Laboratories, or Abbott, a pharmaceuticals and health care products company. Dr. Leonard has over 30 years of combined experience in medicine, research and management serving in various

roles at Abbott beginning in 1992. In addition to the board of directors of Intellia, Dr. Leonard has served on the boards of Quintiles Transnational Holdings Inc., a biopharmaceutical development and commercial outsourcing service, since February 2015, Chimerix, Inc. a biopharmaceutical company, since June 2014 and Vitae Pharmaceuticals, Inc., a biotechnology company, since July 2015. He received a B.A. in biochemistry from the University of Wisconsin at Madison and an M.D. from Johns Hopkins University. Dr. Leonard completed his residency in internal medicine at Stanford University School of Medicine followed by a postdoctoral fellowship in molecular virology at the National Institute of Allergy and Infectious Diseases at the National Institutes of Health. We believe that Dr. Leonard's extensive experience in drug development and the biopharmaceutical industry provides him with the qualifications and skills to serve as a director of our company.

David V. Morrissey, Ph.D., has served as our Chief Technology Officer since July 2014. Prior to joining Intellia, Dr. Morrissey was an executive director at the Novartis Institutes for Biomedical Research, Inc., a biopharmaceutical company, from 2007 to 2014 where he helped establish and head its RNAi therapeutics unit. Prior to Novartis, Dr. Morrissey was the Senior Director of Antiviral Therapeutics at Sirna Therapeutics, Inc. a biotechnology company, from 2005 to 2007. He received his B.S. in biology from Clark University, an M.S. in microbiology from The University of Connecticut, a Ph.D. in biology from Wesleyan University and completed his postdoctoral fellowship at Bristol-Myers Squibb.

José E. Rivera, J.D., has served as our Chief Operating Officer and Chief Legal Officer since April 2015. He joined Intellia in July 2014 as our General Counsel and Chief Talent Officer. Prior to joining Intellia, Mr. Rivera was the Vice President, Chief Ethics and Compliance Officer at AbbVie from its spin-out from Abbott in January 2013 until September 2013. Prior to that, from 1996 to 2012, Mr. Rivera led various legal groups at Abbott, including patents and trademarks, intellectual property litigation, and regulatory legal and general litigation. Mr. Rivera received his B.A. in economics from Boston College and his J.D. from Harvard Law School.

Sapna Srivastava, Ph.D., has served as Chief Financial and Strategy Officer since April 2015. Prior to joining Intellia, from 2012 to 2015, Dr. Srivastava served as an independent strategy advisor to various therapeutic-focused biotechnology companies and co-founded a neuroscience-focused biotechnology company. Prior to that, from 2010 to 2012, she served as a senior analyst and team leader of the biotechnology group at Goldman Sachs, and from 2004 to 2009, she served as a senior biotechnology analyst at Morgan Stanley. She also served as a principal and senior biotechnology analyst at ThinkEquity Partners, LLC from 2003 to 2004. She started her career at J.P. Morgan in 1999. Dr. Srivastava received her B.Sc. from the University of Bombay in India and a Ph.D. in neuroscience from New York University Medical Center.

Jean-Francois Formela, M.D., has served as a member of our board of directors since our founding in May 2014. Dr. Formela is currently a partner in the life sciences group of Atlas Venture and has served in such capacity since joining Atlas Venture in 1993. Since September 2010, Dr. Formela has served as a director of Egalet Corporation, a publicly-traded biopharmaceutical company, of which he was a co-founder, and where he served as chairman of the board from March 2012 to June 2015. Dr. Formela has served on the boards of RaNA Therapeutics, Inc. and Spero Therapeutics, Inc., since 2011 and 2014, respectively. He was also a founder and previously served as chairman of the board of each these companies. He also serves on the board of directors of the following privately held companies: F-star Biotechnology Limited, Navitor Pharmaceuticals, Inc. and Ataxion Therapeutics, Inc. Within the last five years, Dr. Formela has also served on the boards of directors of the following public companies: Horizon Pharma, Inc., ARCA biopharma, Inc. and Achillion Pharmaceuticals, Inc. Prior to joining Atlas Venture, Dr. Formela served as a senior director of medical marketing and scientific affairs at Schering-Plough Corporation, a pharmaceutical company which merged with Merck & Co., Inc. Dr. Formela began his career as a medical doctor and practiced emergency medicine at Necker University Hospital in Paris. Dr. Formela is a member of the Massachusetts General Hospital Research Advisory Council. He received his M.D. from the Paris University School of Medicine and his M.B.A. from Columbia University. We believe Dr. Formela's experience in the life sciences industry, as well as his practice of medicine, provides him with the qualifications and skills to serve as a director of our company.

Carl L. Gordon, Ph.D., has been a member of our board of directors since August of 2015. Dr. Gordon co-founded OrbiMed Advisors LLC, or OrbiMed, a private equity fund focused on life sciences companies, in 1998

and, since that time, has served as a General Partner and Co-Head of Private Equity. Prior to co-founding OrbiMed, Dr. Gordon was a senior biotechnology analyst at Mehta and Isaly, a pharmaceutical consulting firm and predecessor to OrbiMed, from 1995 to 1997. From 1993 to 1995, Dr. Gordon was a fellow at The Rockefeller University. He received his Ph.D. in Molecular Biology from the Massachusetts Institute of Technology and a bachelor's degree from Harvard College. As a venture capitalist focused on life science companies Dr. Gordon sits on numerous boards, including Acerta Pharma, LLC, ACIR Biosciences, Inc., Adimab, LLC, Alector, LLC, Armo Biosciences, Inc., Arsanis Biosciences, Inc., Good Start Genetics, Inc., Igenica, Inc., Oxford Oncology, Inc., Selecta Biosciences, Inc., Singulex, Inc., and True North Therapeutics, Inc. In the last five years, he has also served on the boards of Acceleron Pharma, Inc., Amarin Corporation plc, and Pacira Pharmaceuticals, Inc. We believe that Dr. Gordon's financial and operational experience in the biotechnology industry as well as his expertise in molecular biology and financial credentials provide him with the qualifications and skills to serve as a director of our company.

Rachel Haurwitz, Ph.D., has been a member of our board of directors since the company's founding in May 2014. Dr. Haurwitz is the President, Chief Executive Officer and a member of the board of directors of Caribou Biosciences which she co-founded in 2012. Dr. Haurwitz received an A.B. in biological science from Harvard College and a Ph.D. in molecular and cell biology from the University of California, Berkeley. We believe that Dr. Haurwitz's experience in CRISPR/Cas9 development and research provides her with the qualifications and skills to serve as a director of our company.

Composition of Our Board of Directors

As of August 31, 2015, our board of directors consisted of five members, each of whom are members pursuant to the board composition provisions of our certificate of incorporation and agreements with our stockholders. These board composition provisions will terminate upon the completion of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our nominating and corporate governance committee and our board of directors may therefore consider a broad range of factors relating to the qualifications and background of nominees. Our nominating and corporate governance committee's and our board of directors' priority in selecting board members is identification of persons who will further the interests of our stockholders through their established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape, professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal. Our amended and restated certificate of incorporation that will become effective upon the closing of this offering and amended and restated bylaws that will become effective upon the effectiveness of the registration statement of which this prospectus is a part also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Director Independence

Our board of directors has determined that all members of the board of directors, except Drs. Bermingham, Leonard and Haurwitz, are independent directors, including for purposes of the rules of The NASDAQ Global Market and the Securities and Exchange Commission, or SEC. In making such independence determination, our board of directors considered the relationships that each non-employee director has with us 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. In considering the independence of the directors listed above, our board of directors considered the association of our directors with the holders of more than 5% of our common stock. Upon the completion of this offering, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of The NASDAQ Global Market and the rules and regulations of the SEC. There are no family relationships among

any of our directors or executive officers. Drs. Bermingham and Leonard are not independent directors under these rules because they are executive officers of the Company and Dr. Haurwitz is not an independent director under these rules because of her affiliation with Caribou.

Staggered Board

In accordance with the terms of our amended and restated certificate of incorporation that will become effective upon the closing of this offering and amended and restated bylaws that will become effective upon the effectiveness of the registration statement of which this prospectus is a part, our board of directors will be divided into three staggered classes of directors and each will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2016 for Class I directors, 2017 for Class II directors and 2018 for Class III directors.

- Our Class I directors will be and ;
- Our Class II directors will be and ; and
- Our Class III director will be .

Our amended and restated certificate of incorporation that will become effective upon the closing of this offering and amended and restated by-laws that will become effective upon the effectiveness of the registration statement of which this prospectus is a part provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

Board Leadership Structure and Board's Role in Risk Oversight

Currently, the role of chairman of the board is separated from the role of Chief Executive Officer, and we plan to keep these roles separated following the completion of this offering. We believe that separating these positions allows our Chief Executive Officer to focus on our day-to-day business, while allowing a chairman of the board to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the board of directors' oversight responsibilities continue to grow. While our amended and restated by-laws and corporate governance guidelines do not require that our chairman and Chief Executive Officer positions be separate, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our financial condition, development and commercialization activities, operations, strategic direction and intellectual property as more fully discussed in the section entitled "Risk Factors" appearing elsewhere in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of the board of directors in overseeing the management of our risks is conducted primarily through committees of the board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures,

their potential impact on us, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables the board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of Our Board of Directors

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 to be adopted by our board of directors and will be effective upon the effectiveness of the registration statement of which this prospectus is a part. Upon the effectiveness of the registration statement of which this prospectus is a part, the composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act of 2002, NASDAQ and SEC rules and regulations.

Audit Committee

, and will serve on the audit committee, which will be chaired by . Our board of directors has determined that , and are "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable NASDAQ rules, and each has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has designated as an "audit committee financial expert," as defined under the applicable rules of the SEC. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending based upon the audit committee's review and discussions with management and our independent registered public accounting firm whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the audit committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

Compensation Committee

, and will serve on the compensation committee, which will be chaired by . Our board of directors has determined that each member of the compensation committee is "independent" as defined in the applicable NASDAQ rules. The compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to the compensation of our Chief Executive Officer;
- evaluating the performance of our Chief Executive Officer in light of such corporate goals and objectives and determining the compensation of our Chief Executive Officer;
- reviewing and approving the compensation of our other executive officers;
- reviewing and establishing our overall management compensation, philosophy and policy;
- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable NASDAQ rules;
- retaining and approving the compensation of any compensation advisors;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- evaluating and approving director compensation;
- preparing the compensation committee report required by SEC rules, if and when required, to be included in our annual proxy statement; and
- reviewing and approving the retention or termination of any consulting firm or outside advisor to assist in the evaluation of compensation matters.

Nominating and Corporate Governance Committee

, and will serve on the nominating and corporate governance committee, which will be chaired by . Our board of directors has determined that each member of the nominating and corporate governance committee is "independent" as defined in the applicable NASDAQ rules. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- reviewing the size and composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- identifying individuals qualified to become members of the board of directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- overseeing the evaluation of our board of directors and management.

Our board of directors may from time to time establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Corporate Governance

Prior to the effectiveness of the registration statement of which this prospectus is a part, we will adopt a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Following the effectiveness of the registration statement of which this prospectus is a part, a current copy of the code will be posted on the Corporate Governance section of our website, which is located at www.intelliatx.com. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

EXECUTIVE COMPENSATION

Executive Compensation Overview

Our executive compensation program has reflected our growth and development-oriented corporate culture. To date, the compensation of our Chief Executive Officer and our other executive officers identified in the 2014 Summary Compensation Table below, who we refer to as the named executive officers, has consisted of a combination of base salary, bonuses and long-term incentive compensation in the form of restricted stock awards. Our named executive officers, like all full-time employees, are eligible to participate in our health and welfare benefit plans. As we transition from a private company to a publicly traded company, we will evaluate our compensation values and philosophy and compensation plans and arrangements as circumstances require. At a minimum, we expect to review executive compensation annually with input from a compensation consultant. As part of this review process, we expect the board of directors and the compensation committee to apply our values and philosophy, while considering the compensation levels needed to ensure our executive compensation program remains competitive. We will also review whether we are meeting our retention objectives and the potential cost of replacing a key employee.

2014 Summary Compensation Table

The following table presents information regarding the total compensation awarded to, earned by, and paid to our named executive officers for services rendered to us in all capacities for the year ended December 31, 2014.

Name and Principal Position	Salary ($)	Bonus ($)(1)	Stock Awards ($)(2)	All Other Compensation ($)(3)	Total ($)
Nessan Bermingham, Ph.D.	29,167	175,000	320,368	—	524,535
Founder, President and Chief Executive Officer					
John M. Leonard, M.D.	75,000	87,500	105,438	8,988	276,926
Chief Medical Officer					
José E. Rivera, J.D.	75,000	81,250	52,719	11,006	219,975
Chief Operating Officer and Chief Legal Officer					

(1) The amounts reflect the discretionary bonus paid in 2015 for performance during 2014.

(2) Amounts reflect the grant date fair value of stock awards granted in 2014 in accordance with Financial Accounting Standards Board, Accounting Standards Codification 718, or ASC 718. Such grant-date fair value does not take into account any estimated forfeitures related to service-vesting conditions. These amounts do not correspond to the actual value that may be recognized by the named executive officers upon vesting of the applicable awards.

(3) Amounts exclude medical, group life insurance and certain other benefits received by the named executive officers that are available generally to all of our salaried employees and certain perquisites and other personal benefits received by the named executive officers which do not exceed $10,000 in the aggregate. The amounts included for Dr. Leonard and Mr. Rivera consist of travel-related and lodging expenses.

Employment Arrangements with our Named Executive Officers

We have entered into an offer letter agreement with each of our named executive officers in connection with their employment with us. These offer letters provide for “at will” employment.

Nessan Bermingham, Ph.D. On December 15, 2014, we entered into a letter agreement with Dr. Bermingham for the position of Chief Executive Officer and President. Dr. Bermingham currently receives an annual base salary of $350,000, which is subject to review and adjustment in accordance with company policy. Dr. Bermingham is also eligible for an annual discretionary bonus of up to 33% of his base salary, payable at the discretion of the board of directors. The amount of such bonus will be determined annually based on our assessment of Dr. Bermingham’s performance and our business conditions. Dr. Bermingham is eligible to participate in employee benefit plans generally available to our executive employees, subject to the terms of

those plans. Under the agreement, subject to Dr. Bermingham's continued employment with us, equity awards we previously made to Dr. Bermingham, which have since been converted to 675,883 shares of founders stock and 540,706 shares of restricted common stock, continue to vest on the terms set forth in the applicable award agreements.

John M. Leonard, M.D. On September 30, 2014, we entered into a letter agreement with Dr. Leonard for the position of Chief Medical Officer. Dr. Leonard currently receives an annual base salary of $300,000, which is subject to review and adjustment in accordance with company policy. Dr. Leonard is also eligible for an annual discretionary bonus of up to 33% of his base salary, payable at the discretion of the board of directors. The amount of such bonus will be determined annually based on our assessment of Dr. Leonard's performance and our business conditions. Dr. Leonard is eligible to participate in employee benefit plans generally available to our executive employees, subject to the terms of those plans. Under the agreement, subject to Dr. Leonard's continued employment with us, an equity award we previously made to Dr. Leonard, which has since been converted to 891,518 shares of restricted common stock, continues to vest on the terms set forth in the award agreement.

José E. Rivera, J.D. On September 30, 2014, we entered into a letter agreement with Mr. Rivera for the position of General Counsel and Chief Talent Officer. Mr. Rivera currently receives an annual base salary of $300,000, which is subject to review and adjustment in accordance with company policy. Mr. Rivera is also eligible for an annual discretionary bonus of up to 33% of his base salary, payable at the discretion of the board of directors. The amount of such bonus will be determined annually based on our assessment of Mr. Rivera's performance and our business conditions. Mr. Rivera is eligible to participate in employee benefit plans generally available to our executive employees, subject to the terms of those plans. Under the agreement, subject to Mr. Rivera's continued employment with us, an equity award we previously made to Mr. Rivera, which has since been converted to 445,758 shares of restricted common stock, continues to vest on the terms set forth in the award agreement.

Employee Confidentiality, Non-Competition, Non-Solicitation and Assignment Agreements

Each of our named executive officers has entered into a standard form agreement with respect to confidential information and assignment of inventions. Among other things, this agreement obligates each named executive officer to refrain from disclosing any of our proprietary information received during the course of employment and to assign to us any inventions conceived or developed during the course of employment. Such agreement also provides that during the period of the named executive officer's employment and for six months thereafter, the named executive officer will not compete with us and will not solicit our employees, consultants, customers or suppliers.

Outstanding Equity Awards at 2014 Fiscal Year-End

The following table sets forth information concerning outstanding equity awards held by each of our named executive officers as of December 31, 2014. All equity awards in the table below were issued upon conversion of awards made by Intellia Therapeutics, LLC prior to the Reorganization.

	Common Stock		Founder Stock	
Name	Number of Shares That Have Not Vested (#)	Market Value of Shares of Stock That Have Not Yet Vested ($)(1)	Number of Shares That Have Not Vested (#)	Market Value of Shares of Stock That Have Not Yet Vested ($)(1)
Nessan Bermingham, Ph.D.	540,706		337,941	
John M. Leonard, M.D.	811,059		—	—
José E. Rivera, J.D.	405,529		—	—

(1) There was no public market for our common stock on December 31, 2014. We have estimated the market value of the unvested stock award based on an assumed initial public offering price of $ per share, the midpoint of the range listed on the cover of this prospectus.

Compensation Risk Assessment

We believe that although a portion of the compensation provided to our executive officers and other employees is performance-based, our executive compensation program does not encourage excessive or unnecessary risk taking. This is primarily due to the fact that our compensation programs are designed to encourage our executive officers and other employees to remain focused on both short-term and long-term strategic goals, in particular in connection with our pay-for-performance compensation philosophy. As a result, we do not believe that our compensation programs are reasonably likely to have a material adverse effect on us.

Employee Benefit and Equity Compensation Plans

2015 Stock Plan

Our 2015 Plan was approved by our board of directors in August 2015 and by our stockholders in August 2015. We reserved an aggregate of 7,044,591 shares of our common stock for the issuance of awards under the 2015 Plan. This number is subject to adjustment in the event of a subdivision of outstanding stock, a stock dividend, a combination or consolidation of stock, a reclassification, or any other increase or decrease in the number of issued shares of common stock. Effective upon the closing of this offering, our 2015 Plan will be restated as our 2015 Restated Plan. The shares of common stock underlying any awards that are canceled or reacquired by us or are withheld by us for payment of the purchase price, exercise price or withholding taxes under the 2015 Plan will be added back to the shares of common stock available for issuance under the 2015 Plan. Upon the closing of this offering, such shares will be added to the shares of common stock available for issuance under the 2015 Restated Plan.

The 2015 Plan is administered by our board of directors. The administrator has full authority and discretion to take any actions it deems necessary or advisable for the administration of the 2015 Plan.

Our employees, outside directors and consultants are eligible to receive awards under the 2015 Plan.

The 2015 Plan provides that upon the effectiveness of a "sale event," as defined in the 2015 Plan, an acquirer or successor entity may assume, continue or substitute outstanding awards under the 2015 Plan. To the extent that awards granted under the 2015 Plan are not assumed or continued or substituted by the successor entity, upon the effective time of the sale event, such awards under the 2015 Plan shall terminate. In the event of such termination, all options and stock appreciation rights that are not exercisable immediately prior to the effective time of the sale event shall become fully exercisable as of the effective time of the sale event, all other awards with time-based vesting, conditions or restrictions, shall become fully vested and nonforfeitable as of the effective time of the sale event and all awards with conditions and restrictions relating to the attainment of performance goals may become vested and nonforfeitable in the discretion of the compensation committee, following which all awards granted under the 2015 Plan shall terminate. In addition, in connection with the termination of the 2015 Plan upon a sale event, we may make or provide for a cash payment to participants holding vested and exercisable options and stock appreciation rights equal to the difference between the per share cash consideration payable to stockholders in the sale event and the exercise price of the options or stock appreciation rights and we may make or provide for a cash payment to participants holding other vested awards.

Our board of directors may amend, suspend or terminate the 2015 Plan at any time and for any reason, subject to stockholder approval where such approval is required by applicable law.

2015 Amended and Restated Stock Option and Incentive Plan

Our 2015 Restated Plan, was adopted by our board of directors on , 2015 and approved by our stockholders on , 2015 and will become effective on the date immediately prior to the date on which the registration statement of which this prospectus is part is declared effective by the SEC. The 2015 Restated Plan will amend and restate the 2015 Plan. The 2015 Restated Plan allows the board of directors' compensation committee to make equity-based incentive awards to our officers, employees, directors and other key persons (including consultants).

We have initially reserved shares of our common stock for the issuance of awards under the 2015 Restated Plan. These limits are subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

The shares we issue under the 2015 Restated Plan will be authorized but unissued shares or shares underlying any awards that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by us prior to vesting, satisfied without the issuance of stock, expire or are otherwise terminated (other than by exercise) under the 2015 Restated Plan.

Stock options and stock appreciation rights with respect to no more than shares of common stock may be granted to any one individual in any one calendar year. The maximum number of shares that may be issued as incentive stock options may not exceed shares. The value of all awards made under the 2015 Restated Plan and all other cash compensation paid by us to any non-employee director in any calendar year shall not exceed $.

The 2015 Restated Plan will be administered by our compensation committee. Our compensation committee has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2015 Restated Plan. Persons eligible to participate in the 2015 Restated Plan will be those full or part-time officers, employees, non-employee directors and other key persons (including consultants) as selected from time to time by our compensation committee in its discretion.

The 2015 Restated Plan permits the granting of both options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code and options that do not so qualify. The option exercise price of each option will be determined by our compensation committee but may not be less than 100% of the fair market value of our common stock on the date of grant. The term of each option will be fixed by our compensation committee and may not exceed ten years from the date of grant. Our compensation committee will determine at what time or times each option may be exercised.

Our compensation committee may award stock appreciation rights subject to such conditions and restrictions as it may determine. Stock appreciation rights entitle the recipient to shares of common stock, or cash, equal to the value of the appreciation in our stock price over the exercise price. The exercise price may not be less than 100% of the fair market value of our common stock on the date of grant. The term of each stock appreciation right will be fixed by our compensation committee and may not exceed ten years from the date of grant. Our compensation committee will determine at what time or times each stock appreciation right may be exercised.

Our compensation committee may award restricted shares of common stock and restricted stock units to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with us through a specified vesting period. Our compensation committee may also grant shares of common stock that are free from any restrictions under the 2015 Restated Plan. Unrestricted stock may be granted to participants in recognition of past services or for other valid consideration and may be issued in lieu of cash compensation due to such participant.

Our compensation committee may grant performance share awards to participants that entitle the recipient to receive awards of common stock upon the achievement of certain performance goals and such other conditions as our compensation committee may determine. Our compensation committee may grant dividend equivalent rights to participants that entitle the recipient to receive credits for dividends that would be paid if the recipient had held a specified number of shares of common stock.

Our compensation committee may grant cash bonuses under the 2015 Restated Plan to participants, subject to the achievement of certain performance goals.

Our compensation committee may grant awards of restricted stock, restricted stock units, performance share awards or cash-based awards under the 2015 Restated Plan that are intended to qualify as “performance-based compensation” under Section 162(m) of the Code. Such awards will only vest or become payable upon the

attainment of performance goals that are established by our compensation committee and related to one or more performance criteria. The performance criteria that could be used with respect to any such awards include: total stockholder return, earnings before interest, taxes, depreciation and amortization, net income (loss) (either before or after interest, taxes, depreciation and/or amortization), changes in the market price of our common stock, economic value-added, development, clinical, regulatory or commercial milestones, funds from operations or similar measure, sales or revenue, acquisitions or strategic transactions, operating income (loss), cash flow (including, but not limited to, operating cash flow and free cash flow), return on capital, assets, equity, or investment, return on sales, gross or net profit levels, productivity, expense, margins, operating efficiency, customer satisfaction, working capital, earnings (loss) per share of our common stock, sales or market shares and number of customers, any of which may be measured either in absolute terms or as compared to any incremental increase or as compared to results of a peer group. From and after the time that we become subject to Section 162(m) of the Code, the maximum award that is intended to qualify as "performance-based compensation" under Section 162(m) of the Code that may be made to certain of our officers during any one calendar year period is shares of common stock with respect to a share-based award and $ with respect to a cash-based award.

The 2015 Restated Plan provides that upon the effectiveness of a "sale event," as defined in the 2015 Restated Plan, an acquirer or successor entity may assume, continue or substitute outstanding awards under the 2015 Restated Plan. To the extent that awards granted under the 2015 Restated Plan are not assumed or continued or substituted by the successor entity, upon the effective time of the sale event, such awards under the 2015 Restated Plan shall terminate. In addition, in connection with the termination of the 2015 Restated Plan upon a sale event, we may make or provide for a cash payment to participants holding vested and exercisable options and stock appreciation rights equal to the difference between the per share cash consideration payable to stockholders in the sale event and the exercise price of the options or stock appreciation rights and we may make or provide for a cash payment to participants holding other vested awards.

Our board of directors may amend or discontinue the 2015 Restated Plan and our compensation committee may amend or cancel outstanding awards for purposes of satisfying changes in law or any other lawful purpose, but no such action may adversely affect rights under an award without the holder's consent. Certain amendments to the 2015 Restated Plan require the approval of our stockholders.

No awards may be granted under the 2015 Restated Plan after the date that is ten years from the date of stockholder approval of the 2015 Restated Plan. No awards under the 2015 Restated Plan have been made prior to the date hereof.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax-advantaged basis. All participants' interests in their contributions are 100% vested when contributed. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The retirement plan is intended to qualify under Section 401(a) of the Code. We do not currently make discretionary contributions or matching contributions to our 401(k) plan.

DIRECTOR COMPENSATION

The following table presents the total compensation for each person who served as a non-employee member of our board of directors during the period from May 7, 2014 (inception) to December 31, 2014. Other than as set forth in the table and described more fully below, we did not pay any compensation, make any equity awards or non-equity awards to or pay any other compensation to any of the non-employee members of our board of directors in 2014. We reimburse non-employee members of our board of directors for reasonable travel expenses. Dr. Nessan Bermingham, our Founder, President and Chief Executive Officer, Dr. John M. Leonard, our Chief Medical Officer, and Dr. Jean-François Formela did not receive any compensation for their respective service as members of our board of directors during fiscal year 2014. Dr. Bermingham's and Dr. Leonard's compensation for service as employees for fiscal year 2014 is presented in the "2014 Summary Compensation Table."

Name	Fees Earned or Paid in Cash ($)	Equity Awards ($) (1)	Total ($)
Jean-François Formela, M.D.	—	—	—
Rachel Haurwitz, Ph.D.	—	67,588	67,588
Andrew May, Ph.D.(2)	—	67,588	67,588

(1) We issued to each of Rachel Haurwitz, Ph.D. and Andrew May, Ph.D. 135,176 time-vested common units with a grant date fair value of $50,015 and 135,176 incentive units with a grant date fair value of $17,573. These awards vest as to 25% of the total award on the one-year anniversary of grant. The remaining 75% of the total award vests in 36 substantially equal monthly installments at the end of each calendar month thereafter. In connection with certain corporate transactions, any unvested awards vest immediately. Upon grant, Drs. Haurwitz and May each then contributed all of their units to Caribou.

(2) Dr. May resigned from our board of directors effective August 20, 2015.

We intend to put in place a formal director compensation policy for all of our non-employee directors prior to the completion of this offering.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than the compensation agreements and other arrangements described under "Executive and Director Compensation" in this prospectus and the transactions described below, since our inception on May 7, 2014, there has not been and there is not currently proposed, any transaction or series of similar transactions to which we were, or will be, a party in which the amount involved exceeded, or will exceed, $120,000 and in which any director, executive officer, holder of five percent or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of the foregoing persons, had, or will have, a direct or indirect material interest.

License Agreement and Services Agreement with Caribou Biosciences, Inc.

In July 2014 we entered into a license agreement with Caribou Biosciences, Inc., or Caribou. We also entered into a related services agreement with Caribou in July 2014. See the section entitled "Business—Intellectual Property—Caribou Biosciences In-Licensed Intellectual Property" appearing elsewhere in this prospectus for more information. Rachel Haurwitz, a member of our board of directors, and Andrew May, a former member of our board of directors, are executive officers and stockholders of Caribou. Dr. Haurwitz is the President and Chief Executive Officer and a member of the board of Caribou. Dr. May currently serves as the Chief Scientific Officer of Caribou. Caribou Therapeutics Holdco, LLC, a holding company owned and managed by Caribou, is a greater than 5% stockholder in our company. Pursuant to the terms of the license agreement with Caribou, we hold an exclusive, worldwide, royalty-free license, or the Caribou license, for the use of any CRISPR/Cas9-related patents and applications that Caribou had developed and filed, as well as any CRISPR/Cas9-related intellectual property developed by Caribou between July 16, 2014 and the time period specified in the license agreement in the field of human therapeutics, other than anti-fungal and anti-microbial uses. Pursuant to the services agreement entered into with Caribou in parallel with the license agreement, we are also receiving research and development services from Caribou until November 2016.

In relation to our founding, on July 16, 2014, Intellia Therapeutics, LLC, our former sole stockholder and holding company parent, issued junior preferred units to Caribou Therapeutics Holdco, LLC. We also issued time-vested common units and incentive units to each of Drs. Haurwitz and May. Each of them then contributed all of their units to Caribou Therapeutics Holdco, LLC. All of these units held by Caribou Therapeutics Holdco, LLC were exchanged in the Reorganization for shares of junior preferred stock, shares of founder stock and shares of common stock. We also agreed to pay Caribou $5.0 million in service fees over the term of the services agreement and agreed to pay a percentage of Caribou's patent prosecution, filing and maintenance costs for such licensed intellectual property. As of June 30, 2015, we have paid $2.3 million to Caribou pursuant to the services agreement and $0.2 million for our portion of the patent prosecution, filing and maintenance costs pursuant to the license agreement.

License and Collaborative Research Agreement with Novartis Institutes for BioMedical Research, Inc.

In December 2014, we entered into a collaboration and license agreement, or the Novartis agreement, with Novartis Institutes for BioMedical Research, Inc., or Novartis, for the research of new CRISPR/Cas9-based therapies using CAR T cells and HSCs. We received a $10.0 million non-refundable upfront technology access payment from Novartis in January 2015 and are entitled to an additional $40.0 million, in aggregate, in additional technology access fees and research payments during the five-year collaboration term. In addition, we are eligible to receive up to $230.3 million in development, regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis. See the section entitled "Business—Strategic Collaborations—Novartis Institutes for BioMedical Research, Inc." appearing elsewhere in this prospectus for more information.

Novartis is a greater-than-5% stockholder in our company. Prior to our entry into the Novartis agreement, in September 2014, we entered into an agreement with Novartis for the exclusive right to negotiate a transaction involving our grant to Novartis of certain rights to our CRISPR/Cas9 technology. Pursuant to the exclusivity agreement, we agreed to issue to Novartis preferred units in exchange for a fee. We issued Novartis preferred

units, which converted into 4,761,905 shares of our Class A-1 preferred stock and 2,666,666 shares of our Class A-2 preferred stock in the Reorganization. Our preferred units were issued to Novartis pursuant to the terms of the September 2014 Unit Purchase Agreement described below.

Private Placements of Securities

Class A/Junior Preferred Unit Financing of Intellia Therapeutics, LLC

In July 2014, Intellia Therapeutics, LLC entered into an Equity Contribution and Unit Purchase Agreement among Atlas and Caribou, pursuant to which:

- Atlas contributed to Intellia Therapeutics, LLC $2,899,999 in cash and 1,000 shares of our common stock that were purchased for $100,000 in June 2014 in exchange for 2,857,142 Class A preferred units; and
- In exchange for 8,110,599 junior preferred units, Caribou, through its wholly owned, subsidiary, Caribou Therapeutics Holdco, LLC, contributed to us all of its membership interests of Intellia, LLC. Intellia, LLC was a holding company that was the original party to the license agreement with Caribou and otherwise had no other assets or operations prior to being merged with and into us in July 2014. See the section entitled “License Agreement and Services Agreement with Caribou Biosciences, Inc.” for more information.

Class A-1 Preferred Unit Financing of Intellia Therapeutics, LLC

In September 2014, in connection with our Class A-1/A-2 preferred unit financing, we entered into a unit purchase agreement, or the Class A-1/A-2 purchase agreement, pursuant to which we agreed to issue and sell to investors an aggregate of (i) 5,714,287 Class A-1 preferred units at a purchase price of $1.05 for aggregate consideration of $6,000,001 and (ii) 3,999,999 Class A-2 preferred units at a purchase price of $1.50 for aggregate consideration of $5,999,999 at a subsequent closing. In December 2014, we amended the Class A-1/A-2 purchase agreement to provide for the issuance of the Class A-2 units at two subsequent closings.

The table below sets forth the aggregate number of Class A-1 preferred units sold to our directors, executive officers or holders of more than 5% of our capital stock at the time of such issuance, or an affiliate or immediate family member thereof under the Class A-1/A-2 purchase agreement:

Name	Class A-1 Preferred Units	Total Purchase Price
Atlas Venture Fund IX, LP	952,382	$ 1,000,001
Novartis Institutes for BioMedical Research, Inc	4,761,905	$ 5,000,000

Class A-2 Preferred Unit Financing of Intellia Therapeutics, LLC

The first subsequent closing under the Class A-1/A-2 purchase agreement, as amended, occurred in December 2014. The second subsequent closing under the Class A-1/A-2 purchase agreement, as amended, occurred in January 2015. The table below sets forth the number of Class A-2 preferred units sold to our directors, executive officers or holders of more than 5% of our capital stock at the time of such issuance, or an affiliate or immediate family member thereof:

Name	Class A-2 Preferred Units	Total Purchase Price
Atlas Venture Fund IX, LP	1,333,333	$ 2,000,000
Novartis Institutes for BioMedical Research, Inc	2,666,666	$ 3,999,999

Series B Preferred Stock Financing

In August 2015, Intellia Therapeutics, Inc. entered into a Series B Preferred Stock Purchase Agreement pursuant to which we issued and sold an aggregate of 13,336,601 shares of our Series B preferred stock at a price per share of $5.25, for an aggregate purchase price of $70.0 million. The following table sets forth the number of shares of our Series B Preferred Stock that we issued to our 5% stockholders and their affiliates in this transaction:

Name	Shares of Series B Preferred Stock	Total Purchase Price
Atlas Venture Fund IX, LP	761,905	$ 4,000,001
Entities affiliated with Fidelity Management & Research LLC	2,857,143	$ 15,000,001
Novartis Institutes for BioMedical Research, Inc	761,905	$ 4,000,001
Entities affiliated with OrbiMed Advisors LLC	3,730,618	$ 19,585,745

Investors' Rights Agreement

In connection with our Series B Preferred Stock financing, on August 20, 2015, we entered into an investors' rights agreement with the holders of our Junior, Series A-1, Series A-2 and Series B Preferred Stock and certain key holders of our common stock. This agreement provides these holders with certain rights relating to the registration of their shares under the Securities Act. For a more detailed description of these registration rights, see the section titled "Description of Capital Stock—Registration Rights."

This agreement also establishes certain "information and observer" rights and rights of first offer, and sets forth certain covenants relating to insurance, employee agreements, employee stock, indemnification, and related matters. On the closing of this offering, all provisions relating to these rights and covenants will terminate.

Consulting Arrangement

From inception through September 30, 2014, we received consulting and management services from Atlas Venture Advisors, Inc., or Atlas Venture Advisors, which through its affiliate, Atlas Venture Fund IX, has a greater than 5% ownership interest in us. We have paid Atlas Venture Advisors $0.3 million for these services, including the reimbursement of expenses. We did not and do not have a written agreement in place with Atlas Venture Advisors with respect to the provision of consulting and management services, nor did or do we have a written agreement in place for the use of Atlas Venture Advisors' premises. From time to time and at our request, partners and associates of Atlas Venture Advisors provided us with certain strategic and ordinary course business operations consulting services at fees mutually agreed upon in advance by us and Atlas Venture Advisors. For example, prior to becoming a consultant and then employee of our company, Atlas Venture Advisors provided us with the services of Nessan Bermingham, who is our Founder, President and Chief Executive Officer and who provided scientific leadership, business development and executive services. We paid these consulting and management services fees to Atlas Venture Advisors pursuant to invoices that Atlas Venture Advisors submitted to us from time to time. The consulting and management services fees paid to Atlas Venture Advisors were based upon customary rates for such services and did not exceed 5% of the consolidated gross revenue of Atlas Venture Advisors during any of the past three fiscal years.

Indemnification Agreements

We have entered into agreements to indemnify our directors and executive officers. These agreements will, among other things, require us to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in our right, on account of any services undertaken by such person on behalf of our company or that person's status as a member of our board of directors to the maximum extent allowed under Delaware law.

Policies for Approval of Related Party Transactions

Our board of directors reviews and approves transactions with directors, officers and holders of five percent or more of our voting securities and their affiliates, each a related party. Prior to this offering, the material facts as to the related party's relationship or interest in the transaction are disclosed to our board of directors prior to their consideration of such transaction, and the transaction is not considered approved by our board of directors unless a majority of the directors who are not interested in the transaction approve the transaction. Further, when stockholders are entitled to vote on a transaction with a related party, the material facts of the related party's relationship or interest in the transaction are disclosed to the stockholders, who must approve the transaction in good faith.

In connection with this offering, we intend to adopt a written related party transactions policy that such transactions must be approved by our audit committee or another independent body of our board of directors.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information known to us regarding beneficial ownership of our capital stock as of August 31, 2015, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each person or group of affiliated persons known by us to be the beneficial owner of more than five percent of our capital stock;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

To the extent that the underwriters sell more than shares in this offering, the underwriters have the option to purchase up to an additional shares at the initial public offering price less the underwriting discount.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Under those rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. Except as noted by footnote, and subject to community property laws where applicable, we believe, based on the information provided to us, that the persons and entities named in the table below have sole voting and investment power with respect to all common stock shown as beneficially owned by them.

The percentage of beneficial ownership prior to this offering in the table below is based on 44,269,269 shares of common stock deemed to be outstanding as of August 31, 2015, assuming the conversion of all outstanding shares of our preferred stock upon the closing of this offering, and the percentage of beneficial ownership at this offering in the table below is based on shares of common stock assumed to be outstanding after the closing of the offering. All of our preferred stock convert into shares of common stock on a one-for-1.0992035 basis. The information in the table below assumes no exercise of the underwriters' option to purchase additional shares.

	Shares Beneficially Owned Prior to Offering		Shares Beneficially Owned After Offering	
Name and Address of Beneficial Owner(1)	Number	Percentage	Number	Percentage
5% Stockholders:				
Atlas Venture Fund IX, L.P.(2)	7,530,641	17.0%		
Caribou Therapeutics Holdco, LLC(3)	9,509,540	21.5%		
Entities affiliated with Fidelity Management & Research Company(4)	3,140,577	7.1%		
Novartis Institutes for BioMedical Research, Inc.(5)	9,002,998	20.3%		
Entities affiliated with OrbiMed Advisors LLC(6)	4,100,707	9.3%		
Named Executive Officers and Directors:				
Nessan Bermingham, Ph.D.(7)	1,337,277	3.0%		
Jean-François Formela, M.D.(8)	—	—		
Carl L. Gordon, Ph.D., CFA(9)	4,100,707	9.3%		
Rachel E. Haurwitz, Ph.D.(10)	9,509,540	21.5%		
John M. Leonard, Ph.D.(11)	891,518	2.0%		
José E. Rivera, J.D.(12)	445,758	1.0%		
All executive officers and directors as a group (9 persons)	17,149,497	38.7%		

(1) Unless otherwise indicated, the address for each beneficial owner is c/o Intellia Therapeutics, Inc., 130 Brookline Street, Suite 201, Cambridge, MA 02139.

(2) Consists of (i) 1,040,107 shares of common stock issuable upon conversion of shares of Founder Stock, which are fully vested, (ii) 4,187,442 shares of common stock issuable upon conversion of shares of Series A-1 Preferred Stock, (iii) 1,465,604 shares of common stock issuable upon conversion of shares of Series A-2 Preferred Stock, and (iv) 837,488 shares of common stock issuable upon

conversion of shares of Series B Preferred Stock. All shares are held directly by Atlas Venture Fund IX, L.P., or Atlas Venture Fund IX. Atlas Venture Associates IX, L.P., or AVA IX LP, is the general partner of Atlas Venture Fund IX, and Atlas Venture Associates IX, LLC, or AVA IX LLC, is the general partner of AVA IX LP. Peter Barrett, Bruce Booth, Jean-Francois Formela, Jeff Fagnan, Chris Lynch and Ryan Moore are the members of AVA IX LLC and collectively make investment decisions on behalf of Atlas Venture Fund IX, is each a director of AVA IX LLC. Dr. Formela is also a member of our board of directors. Dr. Formela disclaims beneficial ownership of such shares, except to the extent of his proportionate pecuniary interest therein, if any. The address for Atlas Venture Fund IX, is 25 First Street, Suite 303, Cambridge, MA 02141.

(3) Consists of (i) an aggregate of 297,171 shares of restricted common stock and 297,171 shares of common stock issuable upon conversion of shares of Founder Stock, all of which was subsequently transferred to Caribou Therapeutics Holdco, LLC, or Caribou Holdco (See the section entitled "Certain Relationships and Related Party Transactions—License Agreement and Services Agreement with Caribou Biosciences, Inc." for additional information) and all of which are subject to vesting requirements, and (ii) 8,915,198 shares of common stock issuable upon conversion of shares of Junior Preferred Stock. Rachel Haurwitz, a greater than 5% stockholder of Caribou, is the President, Chief Executive Officer and a director of Caribou. Caribou Holdco is a wholly-owned subsidiary of Caribou, and Dr. Haurwitz may be deemed to share voting and dispositive power with respect to the shares held by Caribou Holdco. Dr. Haurwitz is a member of our board of directors. Dr. Haurwitz disclaims beneficial ownership of such shares, except to the extent of her pecuniary interest therein, if any. The address for Caribou Therapeutics Holdco, LLC, or Caribou Holdco, is 2929 7th Street, Suite 120, Berkeley, CA 94710.

(4) Consists of (i) 559,289 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Select Portfolios: Biotechnology Portfolio, (ii) 133,680 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, (iii) 31,227 shares of common stock issuable upon conversion of Series B Preferred Stock held by Pyramis Lifecycle Blue Chip Growth Commingled Pool, (iv) 696,998 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Securities Fund: Fidelity Blue Chip Growth Fund, (v) 4,602 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Blue Chip Growth Commingled Pool, (vi) 218,208 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Securities Fund: Fidelity Series Blue Chip Growth Fund, (vii) 182,645 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund, (viii) 664,530 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Mt. Vernon Street: Fidelity Growth Company Fund, (ix) 199,682 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Growth Company Commingled Pool, (x) 442,609 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Securities Fund: Fidelity OTC Portfolio, (xi) 7,107 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity OTC Commingled Pool. These accounts are managed by direct or indirect subsidiaries of Fidelity Management and Research LLC, or FMR LLC. Edward C. Johnson 3d is a Director and the Chairman of FMR LLC and Abigail P. Johnson is a Director, the Vice Chairman and the President of FMR LLC. Members of the family of Edward C. Johnson 3d, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act, or Fidelity Funds, advised by Fidelity Management & Research Company, or FMR Co., a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Boards of Trustees. FMR Co. carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees. The address for FMR Co. is 245 Summer Street, Boston, MA 02110.

(5) Consists of (i) 5,234,302 shares of common stock issuable upon conversion of shares of Series A-1 Preferred Stock, (ii) 2,931,208 shares of common stock issuable upon conversion of shares of Series A-2 Preferred Stock, and (iii) 837,488 shares of common stock issuable upon conversion of shares of Series B Preferred Stock. All shares are held by Novartis Institutes for BioMedical Research, Inc., or Novartis. Novartis is an indirect wholly-owned subsidiary of, and controlled by, Novartis AG. The address for Novartis is 250 Massachusetts Avenue, Cambridge, MA 02139.

(6) Consists of (i) 3,140,581 shares of common stock issuable upon the conversion of shares of Series B Preferred Stock, held by OrbiMed Private Investments V, LP, or OPI V, and (ii) 960,126 shares of common stock issuable upon the conversion of shares of Series B Preferred Stock, held by OrbiMed Global Healthcare Master Fund, L.P., or OGH. OrbiMed Capital GP V LLC, or GP V, is the general partner of OPI V, and OrbiMed Global Healthcare GP LLC, or OGH GP, is the general partner of OGH. OrbiMed Advisors LLC, or OrbiMed Advisors, is the managing member of each of GP V and OGH GP. Samuel D. Isaly is the managing member of and owner of a controlling interest in OrbiMed Advisors. By virtue of such relationships, GP V, OrbiMed Advisors and Mr. Isaly may be deemed to have voting and investment power with respect to the shares held by OPI V and as a result may be deemed to have beneficial ownership of such shares, and OGH GP, OrbiMed Advisors and Mr. Isaly may be deemed to have voting and investment power with respect to the shares held by OGH and as a result may be deemed to have beneficial ownership of such shares. Dr. Carl L. Gordon, one of our board members, is a member of OrbiMed Advisors. Each of GP V, OGH GP, OrbiMed Advisors, Mr. Isaly and Dr. Gordon disclaims beneficial ownership of the shares held by OPI V and OGH, respectively, except to the extent of its or his pecuniary interest therein, if any. The address for these entities is 601 Lexington Avenue, 54th floor, New York, New York 10022.

(7) Consists of (i) 594,345 shares of common stock, which are subject to vesting requirements, and (ii) 742,932 shares of common stock issuable upon conversion of shares of Founder Stock, which are subject to vesting requirements.

(8) See note (2) above.

(9) Consists of the shares listed in footnote (6) above. Dr. Gordon is a member of OrbiMed Advisors, which is the managing member of the general partner of OPI V, and the general partner of OGH, and as such Dr. Gordon may be deemed to share voting and investment power with respect to the shares held by such entities. Dr. Gordon disclaims beneficial ownership of these shares except to the extent of this pecuniary interest therein if any. Dr. Gordon's business address is 601 Lexington Avenue, 54th floor, New York, New York 10022.

(10) Consists of the shares listed in footnote (3) above. Dr. Haurwitz is the President, Chief Executive Officer, a director and greater than 5% stockholder of Caribou, the parent of Caribou Holdco. As such, Dr. Haurwitz may be deemed to share voting and dispositive power with respect to all shares held by such entity. Dr. Haurwitz disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. Dr. Haurwitz's business address is 2929 7th Street, Suite 120, Berkeley, CA 94710.

(11) Consists of 891,518 shares of common stock, which are subject to vesting requirements.

(12) Consists of 445,758 shares of common stock, which are subject to vesting requirements. All shares are held by Rivak Capital LLC, or Rivak. Mr. Rivera is a member and manager of Rivak and has voting and dispositive power over the shares. The address for Rivak is 13450 N. Reigate Lane, Green Oaks, IL 60048.

DESCRIPTION OF CAPITAL STOCK

The following descriptions are summaries of the material terms of our amended and restated certificate of incorporation, which will be effective upon the closing of this offering and amended and restated bylaws, which will be effective upon the effectiveness of the registration statement of which this prospectus is a part. The descriptions of the common stock and preferred stock give effect to changes to our capital structure that will occur immediately prior to the completion of this offering. We refer in this section to our amended and restated certificate of incorporation as our certificate of incorporation, and we refer to our amended and restated bylaws as our bylaws.

General

Upon completion of this offering, our authorized capital stock will consist of shares of common stock, par value $0.0001 per share, and shares of preferred stock, par value $0.0001 per share, all of which shares of preferred stock will be undesignated.

As of August 31, 2015, 44,269,269 shares of our common stock were outstanding and held by 70 stockholders of record. This amount assumes the conversion of all outstanding shares of our preferred stock into common stock, which will occur immediately prior to the closing of this offering.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. The shares to be issued by us in this offering will be, when issued and paid for, validly issued, fully paid and non-assessable.

Preferred Stock

Immediately prior to the completion of this offering, all outstanding shares of our preferred stock will be converted into shares of our common stock. Upon the consummation of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. Immediately after consummation of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Registration Rights

Upon the completion of this offering, the holders of shares of our common stock, including those issuable upon the conversion of preferred stock, will be entitled to rights with respect to the registration of these securities under the Securities Act. These rights are provided under the terms of an investor rights agreement between us, holders of our preferred stock and certain holders our common stock. The investor rights agreement

includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses of underwritten registrations under this agreement will be borne by us and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand Registration Rights

Beginning 180 days after the completion of this offering, the holders of shares of our common stock, including those issuable upon the conversion of shares of our preferred stock upon closing of this offering, are entitled to demand registration rights. Under the terms of the investor rights agreement, we will be required, upon the written request of holders of these securities that would result in an aggregate offering price of at least $10.0 million, to file a registration statement and use commercially reasonable efforts to effect the registration of all or a portion of these shares for public resale. We are required to effect only two registrations pursuant to this provision of the investor rights agreement.

Short-Form Registration Rights

Upon the completion of this offering, the holders of shares of our common stock, including those issuable upon the conversion of shares of our preferred stock upon closing of this offering, are also entitled to short form registration rights. Pursuant to the investor rights agreement, if we are eligible to file a registration statement on Form S-3, upon the written request of 20% in interest of these holders to sell registrable securities at an aggregate price of at least $4.0 million, we will be required to use commercially reasonable efforts to effect a registration of such shares. We are required to effect only two registrations in any twelve month period pursuant to this provision of the investor rights agreement.

Piggyback Registration Rights

Upon the completion of this offering, the holders of shares of our common stock, including those issuable upon the conversion of shares of our preferred stock upon closing of this offering, are entitled to piggyback registration rights. If we register any of our securities either for our own account or for the account of other security holders, the holders of these shares are entitled to include their shares in the registration. Subject to certain exceptions contained in the investor rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering to the number of shares which we and the underwriters determine in our sole discretion will not jeopardize the success of the offering.

Indemnification

Our investor rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expiration of Registration Rights

The demand registration rights and short form registration rights granted under the investor rights agreement will terminate on the fifth anniversary of the completion of this offering.

Anti-Takeover Effects of our Certificate of Incorporation and Bylaws and Delaware Law

Our certificate of incorporation and bylaws include a number of provisions that may have the effect of delaying, deferring or preventing another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies

Our certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No Written Consent of Stockholders

Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholders without holding a meeting of stockholders.

Meetings of Stockholders

Our certificate of incorporation and bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements

Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to Certificate of Incorporation and Bylaws

Any amendment of our certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, limitation of liability and the amendment of our bylaws and certificate of incorporation must be approved by not less than % of the outstanding shares entitled to vote on the amendment, and not less than % of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least % of the outstanding shares entitled to vote on the amendment, or, if our board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated Preferred Stock

Our certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Section 203 of the Delaware General Corporation Law

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. 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. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- 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;
- 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, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors 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.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

NASDAQ Global Market Listing

We have applied to list our common stock on The NASDAQ Global Market under the trading symbol “ITTX.”

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be .

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our shares. Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Based on the number of shares outstanding as of August 31, 2015, upon the completion of this offering, shares of our common stock will be outstanding, assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below, and shares of our common stock are restricted shares of common stock subject to time-based vesting terms.

Rule 144

In general, a person who has beneficially owned restricted stock for at least six months would be entitled to sell their 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 Securities Exchange Act of 1934, as amended, or the Exchange Act, periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares 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 then outstanding, which will equal approximately shares immediately after this offering assuming no exercise of the underwriters' option to purchase additional shares, based on the number of shares outstanding as of August 31, 2015; or
- the average weekly trading volume of our common stock on The NASDAQ Global 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.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" included elsewhere in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Lock-Up Agreements

All of our directors and executive officers and certain of our stockholders have signed a lock-up agreement which prevents them from selling any of our common stock or any securities convertible into or exercisable or exchangeable for common stock for a period of not less than 180 days from the date of this prospectus without the prior written consent of the representatives, subject to certain exceptions. See the section entitled "Underwriting" appearing elsewhere in this prospectus for more information.

Registration Rights

Upon completion of this offering, certain holders of our securities will be entitled to various rights with respect to registration of their 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. See the section entitled "Description of Capital Stock—Registration Rights" appearing elsewhere in this prospectus for more information.

Equity Incentive Plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register our shares issued or reserved for issuance under our equity incentive plans. The first such registration statement is expected to be filed soon after the date of this prospectus and will automatically become effective upon filing with the SEC. Accordingly, shares registered under such registration statement will be available for sale in the open market, unless such shares are subject to vesting restrictions with us or the lock-up restrictions described above. As of , 2015, we estimate that such registration statement on Form S-8 will cover approximately shares.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a general discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a foreign corporation or any other foreign organization taxable as a corporation for U.S. federal income tax purposes or;
- a foreign estate or trust, the income of which is not subject to U.S. federal income tax on a net income basis.

This discussion does not address the tax treatment of partnerships or other entities that are past-through entities for U.S. federal income tax purposes or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its tax advisor regarding the tax consequences of acquiring, holding and disposing of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing and proposed U.S. Treasury Regulations promulgated hereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code, generally property held for investment.

This discussion does not address all aspects of U.S. federal income that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of any U.S. federal tax other than the income tax, U.S. state, local or non-U.S. taxes, the alternative minimum tax, or the Medicare tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt or governmental organizations;
- financial institutions;
- brokers or dealers in securities;
- regulated investment companies;
- pension plans;
- controlled foreign corporations;
- passive foreign investment companies;
- persons that have a functional currency other than the U.S. dollar;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;

- persons for whom our stock constitutes "qualified small business stock" within the meaning of Section 1202 of the Code; and
- certain U.S. expatriates.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock.

Distributions on Our Common Stock

Distributions, if any, on our common stock 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 as a tax-free return of the non-U.S. holder's investment, up to such holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in "Gain on sale, exchange or other disposition of our common stock." Any such distributions will also be subject to the discussion below under the section titled "Withholding and Information Reporting Requirements—FATCA."

Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence. Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on Sale, Exchange or Other Disposition of Our Common Stock

In general, a non-U.S. holder will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed-base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" also may apply;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income

tax treaty between the United States and such holder's country of residence) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (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); or

- we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation," unless our common stock is regularly traded on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. If we are determined to be a U.S. real property holding corporation and the foregoing exception does not apply, then a purchaser may withhold 10% of the proceeds payable to a non-U.S. holder from a sale of our common stock and the non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests 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. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in "Distributions on Our Common Stock," generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

Withholding and Information Reporting Requirements—FATCA

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a U.S. federal withholding tax at a rate of 30% on payments of dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," such foreign entity identifies certain of its U.S. investors, if any, or (iii) the

foreign entity is otherwise exempt under FATCA. Under applicable U.S. Treasury regulations, withholding under FATCA currently applies to payments of dividends on our common stock, but will only apply to payments of gross proceeds from a sale or other disposition of our common stock made after December 31, 2016. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of the tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

UNDERWRITING

Under the terms and subject to the conditions contained in an underwriting agreement dated , 2015, we have agreed to sell to the underwriters named below, for whom Credit Suisse Securities (USA) LLC, Jefferies LLC and Leerink Partners LLC are acting as representatives, the following respective numbers of shares of common stock:

Underwriter	Number of Shares
Credit Suisse Securities (USA) LLC	
Jefferies LLC	
Leerink Partners LLC	
Wedbush Securities Inc.	
Total	

The underwriting agreement provides that the underwriters are obligated to purchase all the shares of common stock in the offering if any are purchased, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

We have granted to the underwriters a 30-day option to purchase on a pro rata basis up to additional shares at the initial public offering price less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of common stock.

The underwriters propose to offer the shares of common stock initially at the public offering price on the cover of this prospectus and to selling group members at that price less a selling concession of $ per share. The underwriters may allow a discount of $ per share on sales to other broker-dealers. After the initial public offering the representatives may change the public offering price and concession and discount to other broker-dealers.

The following table summarizes the compensation we will pay:

	Per Share		Total	
	Without Over-allotment	With Over-allotment	Without Over-allotment	With Over-allotment
Underwriting discounts and commissions paid by us	$	$	$	$

We estimate that our out-of-pocket expenses for this offering (not including any underwriting discounts and commissions) will be approximately $. We have agreed to reimburse the underwriters for expenses of approximately $ related to the clearance of this offering with the Financial Industry Regulatory Authority.

The underwriters have informed us that they do not expect sales to accounts over which the underwriters have discretionary authority to exceed 5% of the shares of common stock being offered.

We have agreed that we will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, or file with the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, without the prior written consent of Credit Suisse Securities (USA) LLC, Jefferies LLC and Leerink Partners LLC for a period of 180 days after the date of this prospectus. The restrictions described in this paragraph do not apply in certain circumstances, including grants of employee stock options pursuant to our existing plans or issuances pursuant to the exercise of such employee options.

Our officers and directors and other stockholders and optionholders have agreed that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or

securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse Securities (USA) LLC, Jefferies LLC and Leerink Partners LLC for a period of 180 days after the date of this prospectus.

The underwriters have reserved for sale at the initial public offering price up to shares of the common stock for employees, directors and other persons associated with us who have expressed an interest in purchasing common stock in this offering. The number of shares available for sale to the general public in the offering will be reduced to the extent these persons purchase the reserved shares. Any reserved shares not so purchased will be offered by the underwriters to the general public on the same terms as the other shares.

We have agreed to indemnify the underwriters against liabilities under the Securities Act, or contribute to payments that the underwriters may be required to make in that respect.

We will apply to list the shares of common stock on The NASDAQ Global Market under the symbol “ITTX.”

Prior to the 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 determining the initial public offering price, we and the representatives expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the underwriters;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies;
- the general condition of the securities markets at the time of the offering; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common stock, or that shares of our common stock will trade in the public market at or above the initial public offering price.

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions, penalty bids and passive market making in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment transactions involve sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, creating a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of

shares to close out the 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 over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.
- In passive market making, market makers in the common stock who are underwriters or prospective underwriters may, subject to limitations, make bids for or purchases of our common stock until the time, if any, at which a stabilizing bid is made.

These stabilizing transactions, syndicate covering transactions and penalty bids 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 the 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. These transactions may be effected on The NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time.

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters, or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make Internet distributions on the same basis as other allocations.

Other Relationships

Certain of the underwriters and their affiliates may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they may receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future. The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. In addition, Leerink Partners LLC, an underwriter in this offering, was the placement agent in our Series B financing in August 2015. Affiliates of Leerink Partners LLC were also investors in our Series B financing.

Selling Restrictions

Notice to Investors in the European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive, or each, a Relevant Member State, each underwriter represents and agrees that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, it has not made and will not make an offer of our common stock to the public in that Relevant Member State prior to the publication of a prospectus in relation to our common stock that has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of our common stock to the public in that Relevant Member State at any time:

- to any legal entity that is a qualified investor as defined in the Prospectus Directive;

- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the manager for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer of our common stock shall require the publication by the issuer or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and our common stock to be offered so as to enable an investor to decide to purchase or subscribe our common stock, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU, to the extent implemented in each Relevant Member State) and includes any relevant implementing measure in each Relevant Member State.

Notice to Investors in the United Kingdom

Each underwriter:

- has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, or the FSMA) in connection with the sale or issue of common stock in circumstances in which section 21 of the FSMA does not apply to such underwriter; and
- has complied with, and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of common stock in, from, or otherwise involving the United Kingdom.

This prospectus is directed solely at persons who (i) are outside the United Kingdom or (ii) have professional experience in matters relating to investments or (iii) are persons falling within Article 49(2)(a) to (d) of the FSMA (Financial Promotion) Order 2005 (all such persons together being referred to as "relevant persons"). This prospectus must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this prospectus relates is available only to relevant persons and will be engaged in with relevant persons only.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Certain legal matters related to this offering will be passed upon for the underwriters by Latham & Watkins LLP, Boston, Massachusetts.

EXPERTS

The financial statements as of December 31, 2014 and for the period from May 7, 2014 (inception) to December 31, 2014 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 (File Number 333-) under the Securities Act with respect to the common stock we are offering by this prospectus. This prospectus does not contain all of the information included in the registration statement. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

Upon the completion of the offering, we will be subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facility at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. We also maintain a website at www.intelliatx.com. Upon completion of the offering, you may access, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendment to those reported filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of
Intellia Therapeutics, Inc.

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of operations and comprehensive loss, of members' equity and of cash flows present fairly, in all material respects, the financial position of Intellia Therapeutics, Inc. (successor to Intellia Therapeutics, LLC) at December 31, 2014, and the results of their operations and their cash flows for the period from May 7, 2014 (inception) to December 31, 2014 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
September 4, 2015

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
CONSOLIDATED BALANCE SHEETS
(in thousands, except unit, share and per share data)

	December 31, 2014	June 30, 2015 (unaudited)	Pro Forma June 30, 2015 (unaudited)
ASSETS			
Current assets:			
Cash	$ 9,845	$ 19,765	$ 19,765
Accounts receivable	—	2,000	2,000
Prepaid expenses and other current assets	285	522	522
Total current assets	10,130	22,287	22,287
Property and equipment, net	308	1,460	1,460
Other assets	256	406	406
Total assets	$ 10,694	$ 24,153	$ 24,153
LIABILITIES AND MEMBERS' AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	$ 199	$ 1,545	$ 1,545
Accrued expenses	2,156	2,579	2,579
Accrued intraperiod tax allocation	—	538	538
Current portion of deferred revenue	—	6,138	6,138
Total current liabilities	2,355	10,800	10,800
Deferred revenue, net of current portion	—	5,556	5,556
Other long-term liabilities	773	492	492
Commitments and contingencies			
Members' and stockholders' equity			
Preferred units (Class A-2, Class A-1 and Junior), no par value; 19,348,694 and 20,682,027 units issued and outstanding as of December 31, 2014 and June 30, 2015 (unaudited), respectively; aggregate liquidation preference of $21,516 and $23,516 as of December 31, 2014 and June 30, 2015 (unaudited), respectively; no units issued and outstanding, pro forma as of June 30, 2015 (unaudited)	16,448	20,054	—
Common units, no par value; 2,298,000 units issued and outstanding as of December 31, 2014 and June 30, 2015 (unaudited); no units issued and outstanding, pro forma as of June 30, 2015 (unaudited)	607	765	—
Incentive units, no par value; 2,649,457 and 3,889,092 units issued and outstanding as of December 31, 2014 and June 30, 2015 (unaudited), respectively; no units issued and outstanding, pro forma as of June 30, 2015 (unaudited)	50	158	—
Common stock, $0.0001 par value; no shares authorized, issued or outstanding as of December 31, 2014 and June 30, 2015 (unaudited); 50,000,000 shares authorized, 29,411,638 shares issued and outstanding, pro forma as of June 30, 2015 (unaudited)	—	—	3
Additional paid-in capital	—	—	20,974
Accumulated deficit	(9,539)	(13,672)	(13,672)
Total members' and stockholders' equity	7,566	7,305	7,305
Total liabilities and members' and stockholders' equity	$ 10,694	$ 24,153	$ 24,153

The accompanying notes are an integral part of these consolidated financial statements.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except per unit and per share data)

	Period from May 7, 2014 (inception) to December 31, 2014	Period from May 7, 2014 (inception) to June 30, 2014 (unaudited)	Six Months Ended June 30, 2015 (unaudited)
Collaboration revenue	$ —	$ —	$ 2,663
Operating expenses:			
Research and development	1,105	11	3,337
In-process research and development	6,055	—	—
General and administrative	2,379	167	3,943
Total operating expenses	9,539	178	7,280
Loss before income taxes	(9,539)	(178)	(4,617)
Benefit from income taxes	—	—	484
Net loss	$ (9,539)	$ (178)	$ (4,133)
Net loss per common unit, basic and diluted	$ (11.55)	$ —	$ (2.96)
Net loss per incentive unit, basic and diluted	$ —	$ —	$ (2.96)
Weighted average common units outstanding, basic and diluted	826	—	1,284
Weighted average incentive units outstanding, basic and diluted	—	—	112
Comprehensive loss	$ (9,539)	$ (178)	$ (4,133)
Pro forma net loss per share, basic and diluted (unaudited)	$ (0.82)		$ (0.17)
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)	11,589		24,095

The accompanying notes are an integral part of these consolidated financial statements.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
CONSOLIDATED STATEMENTS OF MEMBERS' EQUITY
(in thousands, except unit data)

	Class A-1, Class A-2 and Junior Preferred		Common		Incentive		Accumulated Deficit	Total Members' Equity
	Units	Amount	Units	Amount	Units	Amount		
Balance at May 7, 2014 (inception)	—	$ —	—	$ —	—	$ —	$ —	$ —
Issuance of Junior Preferred Units in connection with the Caribou agreements	8,110,599	4,055	—	—	—	—	—	4,055
Issuance of Class A-1 and Class A-2 Preferred Units, net of issuance costs of $258	11,238,095	12,393	—	—	—	—	—	12,393
Issuance of common units	—	—	946,237	349	—	—	—	349
Equity-based compensation	—	—	1,351,763	258	2,649,457	50	—	308
Net loss	—	—	—	—	—	—	(9,539)	(9,539)
Balance at December 31, 2014	19,348,694	16,448	2,298,000	607	2,649,457	50	(9,539)	7,566
Issuance of Class A-2 Preferred Units, net of issuance costs of $16	1,333,333	1,984	—	—	—	—	—	1,984
Allocation from Novartis collaboration to carrying value of Class A-1 and Class A-2 Preferred Units	—	2,644	—	—	—	—	—	2,644
Tax provision associated with intraperiod tax allocation	—	(1,022)	—	—	—	—	—	(1,022)
Equity-based compensation	—	—	—	158	1,239,635	108	—	266
Net loss	—	—	—	—	—	—	(4,133)	(4,133)
Balance at June 30, 2015 (unaudited)	20,682,027	$20,054	2,298,000	$ 765	3,889,092	$ 158	$ (13,672)	$ 7,305

The accompanying notes are an integral part of these consolidated financial statements.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(amounts in thousands)

	Period from May 7, 2014 (inception) to December 31, 2014	Period from May 7, 2014 (inception) to June 30, 2014 (unaudited)	Six Months Ended June 30, 2015 (unaudited)
Cash flows from operating activities:			
Net loss	$ (9,539)	$ (178)	$ (4,133)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Acquired in-process research and development	6,055	—	—
Depreciation and amortization expense	3	—	100
Equity-based compensation expense	308	—	266
Benefit from intraperiod tax allocation	—	—	(484)
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(285)	—	(237)
Accounts payable	163	153	1,197
Accrued expenses	1,056	21	504
Deferred revenue	—	—	9,694
Other assets	(256)	—	(31)
Other long-term liabilities	173	—	119
Net cash (used in) provided by operating activities	(2,322)	(4)	6,995
Cash flows from investing activities:			
Purchases of property and equipment	(275)	—	(1,103)
Acquisition of in-process research and development	(300)	—	(600)
Net cash used in investing activities	(575)	—	(1,703)
Cash flows from financing activities:			
Proceeds from sale of Class A-1 and Class A-2 preferred units	12,651	—	4,644
Payment of preferred unit issuance costs	(258)	—	(16)
Proceeds from sale of common units	349	100	—
Net cash provided by financing activities	12,742	100	4,628
Net increase in cash	9,845	96	9,920
Cash at beginning of period	—	—	9,845
Cash at end of period	$ 9,845	$ 96	$ 19,765
Supplemental disclosure of noncash investing and financing activities:			
Purchases of property and equipment unpaid at period end	$ 36	$ —	$ 185
Financing costs incurred but unpaid at period end	—	118	13
Noncash portion of acquired in-process research and development	4,055	—	—
Acquisition of in-process research and development unpaid at period end	1,700	—	1,100

The accompanying notes are an integral part of these consolidated financial statements.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of the Business

Intellia Therapeutics was formed in May 2014 in the state of Delaware as AZRN, Inc. and amended its certificate of incorporation in July 2014 to change its name from AZRN, Inc. to Intellia Therapeutics, Inc. In July 2014, Intellia Therapeutics, LLC was formed as the parent company of Intellia Therapeutics, Inc. In August 2015, the Company completed a series of transactions pursuant to which Intellia Therapeutics, LLC merged with and into its C corporation subsidiary, Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing to exist as the surviving corporation (the "Reorganization"). In connection with this merger, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC received shares of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units in Intellia Therapeutics, LLC received shares of restricted common stock in Intellia Therapeutics, Inc.

Intellia Therapeutics, LLC (collectively referred to with its wholly owned, controlled subsidiary, Intellia Therapeutics, Inc., as "Intellia" or the "Company") is a gene editing company focused on developing potentially curative therapeutics utilizing a recently developed biological tool known as CRISPR/Cas9.

The Company is subject to risks and uncertainties common to early stage companies in the biotechnology industry, including, but not limited to, development by competitors of more advanced or effective therapies, dependence on key executives, protection of and dependence on proprietary technology, compliance with government regulations and ability to secure additional capital to fund operations. Programs currently under development will require significant additional research and development efforts, including preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel and infrastructure and extensive compliance-reporting capabilities. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

The accompanying financial statements have been prepared on a basis that assumes the Company will continue as a going concern and contemplates the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business. Through December 31, 2014 and June 30, 2015 (unaudited), the Company has funded its operations with proceeds from the sale of Class A-1 and Class A-2 Preferred Units and, for the six months ended June 30, 2015, with payments received under its collaboration arrangement with Novartis Institutes for BioMedical Research, Inc. ("Novartis"). Since its inception, the Company has incurred recurring losses, including net losses of $9.5 million for the period from May 7, 2014 (inception) to December 31, 2014 and $4.1 million for the six months ended June 30, 2015 (unaudited). The Company expects to continue to generate operating losses in the foreseeable future.

In August 2015, following the Reorganization, the Company received gross proceeds of $70.0 million from the sale of 13,336,601 shares of Series B preferred stock. The Company expects that the gross proceeds from the sale of Series B preferred stock, together with its cash of $19.8 million as of June 30, 2015 (unaudited), will be sufficient to fund its operations for at least the next twelve months from the date these financial statements were issued. The future of the Company beyond that point is largely dependent on its ability to finance its operations through additional capital raising transactions and collaborations. Although the Company has been successful in raising capital in the past, there is no assurance that additional funding will be available on acceptable terms, if at all. The Company may seek additional funding through sales of equity or convertible debt securities or additional collaboration agreements. The terms of any financing may adversely affect the holdings or the rights of the Company's security holders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting the Company's ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. The Company may not be able to enter into additional collaboration arrangements. The Company's inability to raise capital as and when needed could have a negative impact on its financial condition and ability to pursue its business strategies. The Company could be forced to curtail the development of a product candidate, reduce or delay its development program or one or

more of its other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase its expenditures and undertake development or commercialization activities at its own expense, which could adversely affect its business prospects.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of Intellia Therapeutics, LLC and its wholly owned, controlled subsidiary, Intellia Therapeutics, Inc. All intercompany balances and transactions have been eliminated in consolidation.

Unaudited Interim Financial Information

The accompanying balance sheet as of June 30, 2015, the statements of operations and comprehensive loss and of cash flows for the period from May 7, 2014 (inception) to June 30, 2014 and for the six months ended June 30, 2015, and the statement of members' equity for the six months ended June 30, 2015 are unaudited. The unaudited interim financial statements have been prepared on the same basis as the audited annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of June 30, 2015 and the results of its operations and its cash flows for the period from May 7, 2014 (inception) to June 30, 2014 and the six months ended June 30, 2015. The financial data and other information disclosed in these notes related to the period from May 7, 2014 (inception) to June 30, 2014 and the six months ended June 30, 2015 are unaudited. The results for the six months ended June 30, 2015 are not necessarily indicative of results to be expected for the year ending December 31, 2015, any other interim periods, or any future year or period.

Unaudited Pro Forma Information

In August 2015, the Company completed a series of transactions pursuant to which Intellia Therapeutics, LLC merged with and into its C corporation subsidiary, Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing to exist as the surviving corporation. Refer to Note 12, *Subsequent Events*, for additional information regarding this merger. In connection with this merger, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC received shares of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units of Intellia Therapeutics, LLC received shares of restricted common stock of Intellia Therapeutics, Inc. On September 1, 2015 the Company's board of directors authorized the Company to file a confidential draft registration statement with the Securities and Exchange Commission to sell shares of its common stock to the public. Upon the closing of an initial public offering, all of the Company's outstanding shares of preferred stock will automatically convert into shares of common stock. The unaudited pro forma consolidated balance sheet information as of June 30, 2015 reflects the conversion of all outstanding shares of preferred stock as of that date into common stock in accordance with the applicable preferred series conversion ratio. For purposes of calculating pro forma basic and diluted loss per share, all shares of preferred stock have been treated as if they had been converted to common stock on May 7, 2014 (inception) or on the issuance date of the preferred stock, if later.

Use of Estimates

The preparation of the Company's consolidated financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, revenue recognition, the recognition of research and development expenses and

the valuation of common and incentive units. Estimates are periodically reviewed in light of changes in circumstances, facts and experiences. Actual results may differ materially from management's estimates, judgments and assumptions.

Subsequent Events

The Company considers events or transactions that occur after the balance sheet date but before the financial statements are available to be issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. The Company evaluated all events and transactions through September 4, 2015, the date the consolidated financial statements as of December 31, 2014 were issued. The Company has also evaluated transactions through September 4, 2015, the date the consolidated interim financial statements as of June 30, 2015 were issued.

Concentrations of Credit Risk

The Company's cash may potentially be subject to concentrations of credit risk. The Company generally maintains balances in various operating accounts in excess of federally insured limits with financial institutions that management believes to be of high credit quality.

Property and Equipment

The Company records property and equipment at cost and recognizes depreciation and amortization using the straight-line method over the following estimated useful lives of the respective assets:

Asset Category	Useful Life
Laboratory equipment	5 years
Office furniture and equipment	5 years
Computer equipment	3 years
Leasehold improvements	5 years or term of respective lease, if shorter

Expenditures for repairs and maintenance of assets are expensed as incurred. Upon retirement or sale, the cost of assets disposed and the corresponding accumulated depreciation are removed from the related accounts and any resulting gain or loss is reflected in the results of operations.

Impairment of Long-Lived Assets

The Company tests long-lived assets to be held and used, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying amount of assets or asset group may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets.

Evaluation of recoverability of the asset or asset group is based on an estimate of undiscounted future cash flows resulting from the use of the asset or asset group and its eventual disposition. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the asset or asset group, the assets are written down to their estimated fair values. The impairment loss would be based on the excess of the carrying value of the impaired asset over its fair value, determined based on discounted cash flows. To date, the Company has not recorded any impairment losses on long-lived assets.

Fair Value Measurements

The carrying values of the Company's accounts receivable, accounts payable and accrued expenses approximate their fair values due to the short-term nature of these liabilities.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
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Income Taxes

Intellia Therapeutics, LLC was a Delaware limited liability company for federal and state income tax purposes; therefore, the Company's taxable losses were allocated to the members in accordance with the LLC operating agreement. Accordingly, no federal or state income tax was assessed to Intellia Therapeutics, LLC. Its subsidiary, Intellia Therapeutics, Inc., is a C corporation organized under the laws of Delaware and is subject to federal, state and local income taxes.

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences attributable to differences between carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax reporting purposes and for operating loss and tax credit carryforwards. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes.

The Company's deferred tax assets and liabilities are measured using enacted tax rates expected to apply in the years in which these temporary differences are expected to be recovered or settled. A valuation allowance is recorded to reduce deferred tax assets if it is determined that it is more likely than not that all or a portion of the deferred tax asset will not be realized. The Company considers many factors when assessing the likelihood of future realization of deferred tax assets, including recent earnings results, expectations of future taxable income, carryforward periods available and other relevant factors. The Company records changes in the required valuation allowance in the period that the determination is made.

The Company assesses its income tax positions and records tax benefits for all years subject to examination based upon management's evaluation of the facts, circumstances and information available as of the reporting date. For those tax positions where it is more likely than not that a tax benefit will be sustained, the Company records the largest amount of tax benefit with a greater than 50.0% likelihood of being realized upon ultimate settlement with a taxing authority having full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, the Company does not recognize a tax benefit in the financial statements. The Company records interest and penalties related to uncertain tax positions, if applicable, as a component of income tax expense.

Revenue Recognition

The Company recognizes revenue for each unit of accounting when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectability is reasonably assured.

The terms of the Company's collaboration and license agreement contain multiple deliverables, which include licenses to CRISPR/Cas9-based therapeutic products directed to specific targets, referred to as exclusive licenses, as well as research and development activities to be performed by the Company on behalf of the collaboration partner related to the licensed targets. Payments that the Company may receive under these types of agreements include non-refundable technology access fees, payments for research activities, payments based upon the achievement of specified milestones and royalties on any resulting net product sales.

Multiple-Element Arrangements

The Company's collaboration and license agreement represents a multiple-element arrangement. The Company evaluates its collaborative agreements for proper classification in its statements of operations and comprehensive loss based on the nature of the underlying activity. The Company generally reflects as revenue amounts due under its collaborative agreements related to reimbursement of development activities as the Company is generally the principal under the arrangement.

The Company evaluates multiple-element arrangements to determine (i) the deliverables included in the arrangement and (ii) whether the individual deliverables represent separate units of accounting or whether they

must be accounted for as a combined unit of accounting. When deliverables are separable, consideration received is allocated to the separate units of accounting based on the relative selling price method and the appropriate revenue recognition principles are applied to each unit. When the Company determines that an arrangement should be accounted for as a single unit of accounting, the Company must determine the period over which the performance obligations will be performed and revenue will be recognized. This evaluation requires the Company to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that (i) the delivered item has value to the customer on a standalone basis and (ii) if the arrangement includes a general right of return with respect to the delivered item, delivery or performance of the undelivered item is considered probable and substantially in the Company's control. In assessing whether an item has standalone value, the Company considers factors such as the research, development, manufacturing and commercialization capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the collaboration partner can use any other deliverable for its intended purpose without the receipt of the remaining deliverable, whether the value of the deliverable is dependent on the undelivered item, and whether there are other vendors that can provide the undelivered items.

The consideration received under the arrangement that is fixed or determinable is then allocated among the separate units of accounting based on the relative selling prices of the separate units of accounting. The Company determines the selling price of a unit of accounting within each arrangement using vendor-specific objective evidence of selling price, if available; third-party evidence of selling price if vendor-specific objective evidence is not available; or best estimate of selling price, if neither vendor-specific objective evidence nor third-party evidence is available. Determining the best estimate of selling price for a unit of accounting requires significant judgment. In developing the best estimate of selling price for a unit of accounting, the Company considers applicable market conditions and relevant entity-specific factors, including factors that were contemplated in negotiating the agreement with the customer and estimated costs. The Company validates the best estimate of selling price for units of accounting by evaluating whether changes in the key assumptions used to determine the best estimate of selling price will have a significant effect on the allocation of arrangement consideration between multiple units of accounting.

The Company recognizes arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, the Company recognizes revenue from the combined unit of accounting over the contractual or estimated performance period for the undelivered items, which is typically the term of the Company's research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then the Company recognizes revenue under the arrangement on a straight-line basis over the period the Company is expected to complete its performance obligations. Conversely, if the pattern of performance over which the service is provided to the customer can be determined and objectively measurable performance measures exist, then the Company recognizes revenue under the arrangement using the proportional performance method. Revenue recognized is limited to the lesser of the cumulative amount of payments received or the cumulative amount of revenue earned, as determined using the straight-line method or proportional performance method, as applicable, as of the period ending date.

Significant management judgment is required in determining the level of effort required under an arrangement and the period over which the Company is expected to complete its performance obligations under an arrangement. Steering committee services that are not inconsequential or perfunctory and that are determined to be performance obligations are combined with other research services or performance obligations required under an arrangement, if any, in determining the level of effort required in an arrangement and the period over which the Company expects to complete its aggregate performance obligations.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
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Milestone Revenue

The Company's collaboration and license agreement includes contingent milestone payments related to specific development, regulatory and sales-based milestones. Development and regulatory milestones are typically payable when a product candidate initiates or advances in clinical trial phases, upon submission for marketing approval with regulatory authorities, and upon receipt of actual marketing approvals for a therapeutic or for additional indications. Sales-based milestones are typically payable when annual sales reach specified levels.

The Company evaluates whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation includes an assessment of whether: (i) the consideration is commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item as a result of a specific outcome resulting from the Company's performance to achieve the milestone, (ii) the consideration relates solely to past performance, and (iii) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The Company evaluates factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the particular milestone and the level of effort and investment required to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether a milestone satisfies all of the criteria required to conclude that a milestone is substantive. The Company will recognize revenue in its entirety upon successful accomplishment of any substantive milestones, assuming all other revenue recognition criteria are met. Milestones that are not considered substantive are recognized as earned if there are no remaining performance obligations or over the remaining period of performance, with a cumulative catch-up being recognized for the elapsed portion of the period of performance, assuming all other revenue recognition criteria are met.

Non-refundable research, development and regulatory milestones that are expected to be achieved as a result of the Company's efforts during the period of its performance obligations under the collaboration and license agreements may be considered to be substantive and are recognized as revenue upon the achievement of the milestone, assuming all other revenue recognition criteria are met. If not considered to be substantive, revenue from achievement of milestones is initially deferred and recognized over the remaining term of its performance obligations. Milestones that are not considered substantive because the Company does not contribute effort to their achievement are recognized as revenue upon achievement, assuming all other revenue recognition criteria are met, as there are no undelivered elements remaining and no continuing performance obligations on the Company's part.

Amounts received prior to satisfying the revenue recognition criteria listed above are recorded as deferred revenue in the accompanying balance sheets. Although the Company follows detailed guidelines in measuring revenue, certain judgments affect the application of the Company's revenue policy. For example, in connection with its existing collaboration agreement, the Company has recorded on its balance sheet short-term and long-term deferred revenue based on its best estimate of when such revenue will be recognized. However, this estimate is based on the Company's current research plan and, if its research plan should change in the future, the Company may recognize a different amount of deferred revenue over the following 12-month period.

The estimate of deferred revenue also reflects management's estimate of the periods of the Company's involvement in its collaboration. The Company's primary performance obligations under this collaboration consist of research and development services. In certain instances, the timing of satisfying these obligations can be difficult to estimate. Accordingly, the Company's estimates may change in the future. Such changes to estimates would result in a change in prospective revenue recognition amounts. If these estimates and judgments change over the course of any of the Company's collaborative agreements, it may affect the timing and amount of revenue that the Company will recognize and record in future periods.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist of salaries, equity-based compensation and benefits of employees, facilities expenses, overhead expenses, lab supplies and materials, fees paid to subcontractors and contract research organizations and other external expenses.

The Company records payments made for research and development services prior to the services being rendered as prepaid expense on the consolidated balance sheet and expenses them as the services are provided. Contracts for multi-year research and development services are recorded on a straight-line basis over each annual contractual period based on the total contractual fee when the services rendered are expected to be substantially equivalent over the term of the arrangement. The cost of obtaining licenses for certain technology or intellectual property is recorded to research and development expense when incurred if the licensed technology or intellectual property has not yet reached technological feasibility and has no alternative future use.

Equity-Based Compensation

The Company measures employee equity-based compensation based on the grant date fair value of the incentive unit awards and common unit awards and recognizes equity-based compensation expense, net of estimated forfeitures, on a straight-line basis over the requisite service period of the awards, which is generally the vesting period of the respective award. Compensation expense is recognized for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-vesting forfeitures for service-based awards. The Company estimates forfeitures at the time of grant and revises those estimates in subsequent periods if actual forfeitures differ from those estimates.

The Company measures common and incentive unit-based awards granted to consultants and non-employees based on the fair value of the award on the date of grant. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of the common or incentive units.

The Company classifies equity-based compensation expense in its consolidated statement of operations and comprehensive loss in the same manner in which the award recipient’s salary and related costs are classified or in which the award recipients’ service payments are classified.

Earnings (Loss) per Unit

The Company calculates basic earnings (loss) per common unit by dividing income (loss) allocable to common unitholders by the weighted average number of common units outstanding and calculates basic earnings (loss) per incentive unit by dividing income (loss) allocable to incentive unitholders by the weighted average number of incentive units outstanding. During periods of income, the Company allocates to participating securities a proportional share of income determined by dividing total weighted average participating securities by the sum of the total weighted average common shares and participating securities (the “two-class method”). The Company’s preferred units, common units and incentive units have rights to earnings and to participate in distributions of the Company and are therefore considered to be participating securities. Participating securities have the effect of diluting both basic and diluted earnings per share during periods of income. During periods of loss, the Company allocates no loss to preferred units because they have no contractual obligation to share in the losses of the Company. The Company computes diluted earnings (loss) per share after giving consideration to the dilutive effect of preferred units, common units and incentive units that are outstanding during the period, except where such units would be anti-dilutive.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Segment Information

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's one business segment is the development of gene editing-based therapies for patients with significant unmet medical needs. All of the Company's tangible assets are held in the United States. To date, all of the Company's revenue has been generated in the United States.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes existing revenue recognition guidance. The standard'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 standard defines a five-step process to achieve this principle and will require companies to use more judgment and make more estimates than under the current guidance. The Company expects that these judgments and estimates will include identifying performance obligations in the customer contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. In July 2015, the FASB voted to delay the effective date of this standard such that ASU 2014-09 will be effective for the Company for annual periods beginning after December 15, 2017 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. The Company is evaluating the impact that the adoption of ASU 2014-09 will have on its consolidated financial statements.

In June 2014, the FASB issued ASU 2014-10, *Development Stage Entities*. The amendments in this update removed all incremental financial reporting requirements, including inception-to-date information and certain other disclosures currently required under GAAP, in the financial statements of development stage companies. The amendments are effective for annual reporting periods beginning after December 15, 2014 and interim reporting periods beginning after December 15, 2015. Early adoption is permitted. The Company elected to early adopt this guidance and, therefore, has not presented inception-to-date disclosures in its consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern*. ASU 2014-15 amends ASC 205-40, *Presentation of Financial Statements—Going Concern*, by providing guidance on determining when and how reporting entities must disclose going-concern uncertainties in their financial statements, including requiring management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date of issuance of the entity's financial statements and providing certain disclosures if there is substantial doubt about the entity's ability to continue as a going concern. ASU 2014-15 will be effective for the Company for annual periods ending after December 15, 2016 and interim periods within annual periods beginning after December 15, 2016. The Company is evaluating the potential impact of this ASU on its consolidated financial statements but believes its adoption will have no impact on its financial position, results of operations or cash flows.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation (Topic 810)—Amendments to the Consolidation Analysis*. ASU 2015-02 modifies the existing consolidation guidance in ASC 810, *Consolidation*, by significantly changing the consolidation analysis reporting organizations are required to complete in determining whether to consolidate certain legal entities. ASU 2015-02 requires either a retrospective or modified retrospective approach to adoption and will be effective for the Company for annual periods beginning after December 15, 2015 and for interim periods within those fiscal years. The Company is evaluating the impact of the adoption of ASU 2015-02 on its consolidated financial statements but believes its adoption will have no material impact on its financial position, results of operations or cash flows.

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In April 2015, the FASB issued ASU No. 2015-05, *Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*. ASU 2015-05 amends ASC 350-40, *Internal-Use Software*, by providing customers with guidance on determining whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software. ASU 2015-05 will be effective for the Company for annual periods beginning after December 15, 2015 and interim period within annual periods beginning after December 15, 2016. The Company is evaluating the impact that this ASU may have on its consolidated financial statements, if any.

3. Property and Equipment, net

Property and equipment, net consisted of the following:

	December 31, 2014
	(in thousands)
Laboratory equipment	$ 36
Office furniture and equipment	123
Computer equipment	77
Leasehold improvements	75
Property and equipment	311
Less: Accumulated depreciation and amortization	(3)
Property and equipment, net	$ 308

Depreciation and amortization expense was $3,000 for the period from May 7, 2014 (inception) to December 31, 2014.

4. Accrued Expenses

Accrued expenses consisted of the following:

	December 31, 2014	June 30, 2015
	(in thousands)	(unaudited)
Employee compensation	$ 458	$ 448
Current portion of in-process research and development obligation	1,100	900
Research and development and professional expenses	598	1,112
Other	—	119
	$ 2,156	$ 2,579

In July 2014, the Company entered into agreements with Caribou Biosciences, Inc. ("Caribou"), under which the Company received a license for certain patents and limited research and development services from Caribou. The current portion of in-process research and development obligation represented the portion of the Company's obligation under these agreements that is attributable to the license. Refer to Note 6, *Commitments and Contingencies*, for additional information regarding these agreements.

5. Income Taxes

The Company did not record income tax benefits for the operating losses incurred during the period from May 7, 2014 (inception) to December 31, 2014 or the period from May 7, 2014 (inception) to June 30, 2014 (unaudited) or the six months ended June 30, 2015 (unaudited) due to its uncertainty of realizing a tax benefit from the deferred tax assets.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the six months ended June 30, 2015 (unaudited), the Company recorded an income tax benefit of $0.5 million related to the $2.6 million difference between the cash proceeds received from Novartis for the Company's issuance of Class A-1 and A-2 Preferred Units in September and December 2014 and the fair values of those units on their respective issuance dates. Refer to Note 8, *Collaboration*, for additional information regarding this difference in value. Intraperiod tax allocation rules require the allocation of the provision for income taxes between continuing operations and other categories of earnings, such as items credited directly to members' equity. In periods in which the Company has a year-to-date pre-tax loss from continuing operations and has pre-tax income in other categories of earnings, the Company must allocate the income tax provision to the other categories of earnings. The Company then records a related income tax benefit in continuing operations.

During the six months ended June 30, 2015 (unaudited), the Company allocated $2.6 million from the $30.0 million total fixed amount of consideration under the collaboration agreement with Novartis to the carrying value of the Class A-1 and A-2 Preferred Units to record those units based on their fair value at date of issuance. As a result of this allocation, during the six months ended June 30, 2015 (unaudited), the Company recorded an income tax provision of $1.0 million within members' equity as well as a corresponding income tax benefit of $0.5 million within continuing operations and a $0.5 million accrual for intraperiod tax allocation on its balance sheet.

A reconciliation of the federal statutory income tax rate and the Company's effective income tax rate is as follows:

	Period from May 7, 2014 (inception) to December 31, 2014
Federal statutory income tax rate	(34.0)%
State income taxes	(4.5)
Permanent items	1.1
Research and development tax credits	(0.6)
Change in valuation allowance	38.0
Effective income tax rate	— %

The Company's net deferred tax assets (liabilities) consisted of the following:

	December 31, 2014 (in thousands)
Deferred tax assets:	
Intangibles	$ 2,264
Capitalized start-up costs	745
Net operating loss carryforwards	495
Research and development credit carryforwards	59
Accruals and allowances	61
Gross deferred tax assets	3,624
Deferred tax asset valuation allowance	(3,624)
Net deferred tax asset (liability)	$ —

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As of December 31, 2014, the Company had federal and state net operating loss carryforwards of $1.3 million, which begin to expire in 2034. As of December 31, 2014, the Company had federal and state research and development tax credits carryforwards of approximately $39,000 and $30,000, which begin to expire in 2034 and 2029, respectively.

The Company evaluated the expected realizability of its net deferred tax assets as of December 31, 2014 and determined that there was significant negative evidence due to its net operating loss position and insufficient positive evidence to support the realizability of these net deferred tax assets. The Company concluded it is more likely than not that its net deferred tax assets would not be realized in the future; therefore, a full valuation allowance of $3.6 million was established as of December 31, 2014. The Company had no valuation allowance as of May 7, 2014. During the period from May 7, 2014 to December 31, 2014, the Company recorded no decreases to the valuation allowance as a benefit to income taxes and recorded $3.6 million in valuation allowance increases as a provision to income taxes, resulting in a valuation allowance as of December 31, 2014 of $3.6 million.

Utilization of the net operating loss and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, as amended, due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating loss and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax expense, respectively. The Company has not yet conducted a study to assess whether a change of control, as defined in Section 382, has occurred or whether there have been multiple changes in control since inception.

As of December 31, 2014, the Company had not recorded any unrecognized tax benefits. The Company files income tax returns in the United States federal tax jurisdiction and Massachusetts state tax jurisdiction. The Company has not yet filed its initial year tax returns for the period ended December 31, 2014. Upon filing of the 2014 tax returns, the Company will be subject to examination by the Internal Revenue Service and Massachusetts taxing authorities. There are currently no pending tax examinations.

6. Commitments and Contingencies

Commitments

Caribou Agreement

In July 2014, the Company entered into a license agreement with Caribou for an exclusive, worldwide, royalty-free license for human therapeutic, prophylactic, and palliative uses, except for anti-fungal and anti-microbial uses, of any CRISPR/Cas9-related patents and applications owned, controlled or licensed by Caribou, as well as companion diagnostics to the Company's products or product candidates. This license agreement also includes any CRISPR/Cas9-related intellectual property developed by Caribou between July 16, 2014 and, at least, July 16, 2016 for the Company's field of use.

Pursuant to a services agreement entered into with Caribou in parallel with the Caribou license agreement, the Company is also receiving two years of research and development services from Caribou. Under the services agreement's research plan, Caribou primarily focuses on the improvement and further development of the CRISPR/Cas9 system and its components.

In exchange for 8,110,599 of the Company's Junior Preferred Units, Caribou, through its wholly owned subsidiary, Caribou Therapeutics Holdco, LLC, contributed to the Company all of its membership interests of Intellia, LLC. Intellia, LLC was a holding company that was the original party to the license agreement with Caribou and otherwise had no other assets or operations prior to being merged with and into the Company in July 2014. In addition, the Company is paying Caribou $5.0 million over the term of the two-year services agreement and agreed to pay 30.0% of Caribou's patent prosecution, filing, and maintenance costs for such licensed

intellectual property under the license agreement. The Company granted Caribou an exclusive, royalty-free, worldwide license to any CRISPR/Cas9 patents and know-how for research, development and commercialization activities in Caribou's retained field of use owned or developed by the Company between July 16, 2014 and, at least, July 16, 2016.

For the period from May 7, 2014 (inception) through December 31, 2014, the Company recorded $6.1 million as in-process research and development expense within the statement of operations and comprehensive loss, which represents the fair value of the license received from Caribou. The $6.1 million expense includes $4.1 million associated with the fair value of the Junior Preferred Units issued to Caribou and $2.0 million in committed cash payments under the services agreement, which were determined to be allocable to the value of the licenses received. The $3.0 million in committed cash payments related to the services agreement are being recorded as research and development expense as the services are provided. For the period from May 7, 2014 (inception) through December 31, 2014 and for the six months ended June 30, 2015 (unaudited), the Company recorded $0.3 million and $0.8 million, respectively, in research and development expense for services provided under the Caribou services agreement. The Company had prepaid research and development expenses recorded of $0.2 million and $0.4 million related to the services agreement as of December 31, 2014 and June 30, 2015 (unaudited), respectively.

The Company accounted for the license from Caribou as an acquisition of in-process research and development assets and recorded the entire amount as in-process research and development expense as the Company did not acquire any employees, manufacturing or other facilities, developed processes or clinical stage assets as part of its agreement with Caribou.

Property Lease

In October 2014, the Company entered into an agreement to lease office and laboratory space in Cambridge, Massachusetts under an operating lease agreement with a term through January 2020, with an option to extend the term of the lease for an additional five-year period at the greater of the base rent for the fifth year of the original lease term or the then-current market rent, as defined in the lease. Upon the execution of this lease, the Company provided a $0.3 million security deposit. The Company has recorded this security deposit in other assets on the consolidated balance sheets. The Company recognizes rent expense, inclusive of escalation charges, on a straight-line basis over the initial term of the lease agreement. The Company recorded rent expense of $0.1 million during the period from May 7, 2014 (inception) to December 31, 2014.

The Company's contractual commitments under the Caribou agreements and property lease as of December 31, 2014 are as follows:

Year Ending December 31,	Fixed Payments to Caribou	Property Lease	Total Commitments
		(in thousands)	
2015	$ 2,750	$ 492	$ 3,242
2016	1,500	644	2,144
2017	—	807	807
2018	—	843	843
2019	—	869	869
Thereafter	—	73	73
	$ 4,250	$ 3,728	$ 7,978

This table does not include the Company's obligation to pay 30.0% of Caribou's patent prosecution, filing, and maintenance costs for licensed intellectual property as such costs cannot be reliably estimated until incurred.

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In connection with the July 2014 intellectual property license with Caribou, the Company gained access to sublicensed intellectual property from various academic and professional institutions. Under these sublicenses, the Company may be obligated to pay development and regulatory milestones of up to $6.4 million, sales-based milestones of up to $20.0 million and up to mid single-digit royalties on net sales of any products covered by issued patents to these entities in certain circumstances.

7. Preferred Units

The Company has issued Class A-2, Class A-1 and Junior preferred units (collectively, the "Preferred Units"). The Preferred Units are classified within members' equity. As of December 31, 2014 and June 30, 2015 (unaudited), the Company had issued 19,348,694 and 20,682,027 Preferred Units, respectively.

In July 2014, the Company issued 2,857,142 Class A-1 Preferred Units at an issuance price of $1.05 for gross proceeds of $3.0 million, net of issuance costs of $0.2 million.

In July 2014, the Company issued 8,110,599 Junior Preferred Units in exchange for all of Caribou's membership interest in Intellia, LLC. Intellia, LLC was a holding company that was the original party to the license agreement with Caribou and otherwise had no other assets or operations prior to being merged with and into the Company in July 2014. Refer to Note 6, *Commitments and Contingencies*, for additional information regarding these licenses.

In September 2014, the Company issued an additional 5,714,287 Class A-1 Preferred Units at an issuance price of $1.05 per unit, for gross proceeds of $6.0 million, net of issuance costs of $0.2 million. Of these units, 4.8 million units were issued and sold to Novartis in contemplation of a future collaboration arrangement. These preferred units were subsequently determined to have a fair value of $1.51 per unit; therefore, a portion of the upfront consideration received under the collaboration arrangement was allocated to the carrying value of these preferred units when received during the six months ended June 30, 2015 (unaudited).

In December 2014, the Company issued 2,666,666 Class A-2 Preferred Units to Novartis at an issuance price of $1.50 per unit for gross proceeds of $4.0 million, net of insignificant issuance costs, in contemplation of the collaboration and license arrangement entered into with Novartis at the same time. These preferred units were subsequently determined to have a fair value of $1.67 per unit; therefore, a portion of the upfront consideration received under the collaboration arrangement was allocated to the carrying value of these preferred units when received in 2015.

In January 2015, the Company issued 1,333,333 Class A-2 Preferred Units at an issuance price of $1.50 per unit for gross proceeds of $2.0 million, net of insignificant issuance costs.

Preferred Units consisted of the following:

	December 31, 2014		
	Preferred Units Issued and Outstanding	Carrying Value	Liquidation Preference
		(in thousands)	
Class A-2 Preferred Units	2,666,666	$ 3,986	$ 4,000
Class A-1 Preferred Units	8,571,429	8,407	9,000
Junior Preferred Units	8,110,599	4,055	8,516
	19,348,694	$16,448	$ 21,516

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	June 30, 2015 (unaudited)		
	Preferred Units Issued and Outstanding	Carrying Value	Liquidation Preference
		(in thousands)	
Class A-2 Preferred Units	3,999,999	$ 6,249	$ 6,000
Class A-1 Preferred Units	8,571,429	9,750	9,000
Junior Preferred Units	8,110,599	4,055	8,516
	20,682,027	$20,054	$ 23,516

Prior to the Reorganization, the holders of the Preferred Units had the following rights and preferences:

Voting Rights—The holders of Preferred Units were entitled to vote as a single class with the holders of Common Units on all matters, with each Preferred Unit and Common Unit carrying one vote per unit. In addition, holders of at least 50% of the outstanding Preferred Units, with such holders to include (i) in all cases, Atlas Venture Fund IX, L.P. and (ii) until July 31, 2016, Caribou Therapeutics Holdco, LLC were entitled to take any action required or permitted to be taken at any meeting of the members.

Distributions—The Company's board of directors had authority to determine the amount, if any, of proceeds available for distribution to the unitholders. Such proceeds were to be distributed in accordance with the following order of priority:

- first, to the holders of Class A-1 Preferred Units and Class A-2 Preferred Units, pro rata in proportion to the remaining amount to be distributed to each such holder, until each such holder has received distributions in an amount equal to the preference amount payable in respect of each such Preferred Unit ($1.05 per Class A-1 Preferred Unit and $1.50 per Class A-2 Preferred Unit);
- second, to the holders of Junior Preferred Units, until each such holder has received distributions in an amount equal to the preference amount payable in respect of each such Junior Preferred Unit ($1.05 per Junior Preferred Unit, and up to $8.5 million in the aggregate);
- third, to the holders of Common Units, until each such holder has received distributions in an amount equal to the preference amount payable in respect of each such Common Unit ($1.05 per Common Unit, and up to $2.4 million in the aggregate); and
- thereafter, to all holders of Preferred Units and Common Units pro rata in proportion to their percentage interest (in addition to any payments made in respect of Incentive Units to the extent the distributions made to holders of other Units exceed the applicable "strike price" of the Incentive Units in question).

In addition, if, at any time before July 16, 2019, the aggregate ownership percentage attributable to all outstanding Junior Preferred Units fell less than 10%, then the portion of any proceeds distributable to the holders of Junior Preferred Units was to be increased by an amount such that the Junior Preferred unitholders receive an aggregate amount equal to 10% of all proceeds distributed to all unitholders after the applicable liquidation preferences of the Class A-1 Preferred Units, Class A-2 Preferred Units, Junior Preferred Units and Common Units had been satisfied.

No distributions were made during the period from May 7, 2014 (inception) to December 31, 2014 or during the six months ended June 30, 2015 (unaudited).

Liquidation Preference—In the event of any liquidation, dissolution or winding-up of the Company, the assets of the Company were to be distributed in accordance with the same order of priority as distributions.

The Preferred Units had no conversion or redemption rights; therefore, the Company determined that these securities qualify for classification as equity.

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8. Collaboration

In December 2014, the Company entered into a strategic collaboration agreement with Novartis focused on the *ex vivo* development of new CRISPR/Cas9-based therapies using chimeric antigen receptor T cells ("CAR T cells") and hematopoietic stem cells ("HSCs").

Under the terms of the collaboration, the Company and Novartis may research potential therapeutic, prophylactic and palliative applications of the CRISPR/Cas9 platform in HSCs and CAR T cells. Within the HSC therapeutic space, Novartis may obtain exclusive rights to a limited number of HSC targets, to be selected by Novartis in a series of selection windows, the last of which closes 90 days before the fifth anniversary of the effective date of the collaboration agreement. If Novartis does not exercise its selection rights within each selection window, any such rights will be deemed forfeited by Novartis. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one HSC product directed to at least one of their selected HSC targets.

The Company also agreed to collaborate with Novartis on research activities for CAR T cell targets under a research plan agreed upon by both parties. After completion of the research and development activities contemplated by the CAR T cell program research plan, Novartis will assume sole responsibility for developing any products arising from that research plan and will be responsible for additional costs and expenses of developing, manufacturing and commercializing selected research targets. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one CAR T cell product directed to at least one of their selected CAR T cell targets.

In the last two years of the collaboration term, Novartis will have the option to select a limited number of targets for research, development and commercialization of *in vivo* therapies. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one *in vivo* product directed to each of their selected targets. Novartis'*in vivo* target selections are subject to certain restrictions, including that the targets may not have been already reserved by the Company or be subject to another agreement.

The Company received an upfront technology access payment from Novartis of $10.0 million in January 2015 and is entitled to additional technology access fees of $20.0 million and quarterly research payments of $1.0 million, or up to $20.0 million in the aggregate, during the five-year research term. The Company may also be eligible to receive payments for: (i) each additional HSC target selected by Novartis beyond its initial defined allocation, (ii) each *in vivo* target that Novartis selects and (iii) any exercise by Novartis of certain license options under the agreement. The Company may be eligible to receive, on a per-product basis, regulatory milestone payments of up to $80.3 million for one indication and $130.3 million for two indications, royalties on net sales in the mid-single digits, and net sales milestone payments of up to $100.0 million. Additionally, at the inception of the arrangement, Novartis invested $9.0 million to purchase the Company's Class A-1 and Class A-2 Preferred Units. At date of issuance of the Class A-1 and A-2 Preferred Units in September and December 2014, the difference between the cash proceeds received from Novartis for the units and the $11.6 million estimated fair value of those units at date of issuance was determined to be $2.6 million.

The fixed portion of consideration under the collaboration arrangement was determined to be the $30.0 million of total technology access fees, for which there are no contingent terms. From that amount, the Company allocated $2.6 million to the preferred units purchased by Novartis to record those units based on their fair value at date of issuance. As a result, during the six months ended June 30, 2015 (unaudited), the Company recorded an increase of $2.6 million to the carrying value its Class A-1 and A-2 Preferred Units and a corresponding decrease to the deferred revenue initially recorded in connection with the collaboration agreement with Novartis.

The significant deliverables of this multiple-element revenue arrangement were determined to be licenses CAR T cell and HSC targets and the associated research activities for these programs. The Company further

determined that the licenses and associated research activities and joint steering committee participation did not have standalone value due to the specialized nature of the services to be provided by the Company. Therefore, the deliverables are not separable, and, accordingly, the license and services are treated as a single unit of accounting.

Net of the $2.6 million allocation, the fixed portion of consideration under the arrangement of $27.4 million is being recognized as collaboration revenue over the five-year performance period of the arrangement. As consideration for reimbursement of research and development activities is received, the Company is recognizing as collaboration revenue the portion of those payments representing the percentage of the performance period then completed. The remaining consideration is being recognized over the remaining portion of the five-year performance period on a straight-line basis. During the six months ended June 30, 2015 (unaudited), the Company recorded revenue of $2.7 million related to the collaboration agreement with Novartis. As of June 30, 2015 (unaudited), deferred revenue under the Novartis arrangement was $11.7 million. There was no deferred revenue related to this arrangement as of December 31, 2014.

Agreement Termination Rights

The collaboration term ends in December 2019. The agreement ends (i) upon the expiration of Novartis' payment obligations; or (ii) on the date of expiration of the last-to-expire patent right that is licensed to the Company or Novartis. Novartis may terminate the agreement, without cause, upon 90 days' written notice to the Company subject to certain conditions, including its payment of any accrued and future obligations as if the collaboration had continued through December 2019. Either party may terminate the agreement in the event of the other party's uncured material breach or insolvency.

9. Equity-Based Compensation

Each common unit entitles the holder to one vote on all matters submitted to a vote of the Company's members. Incentive unit holders are not entitled to vote. Each common unit and incentive unit has the right to participate in distributions under the operating agreement. As of December 31, 2014 and June 30, 2015 (unaudited), the Company had reserved 1,405,843 units and 851,208 units, respectively, for future grant.

The Company values its common and incentive units by taking into consideration its most recently available valuation of common and incentive units performed by management and the board of directors as well as additional factors which may have changed since the date of the most recent contemporaneous valuation through the date of grant.

During the period from May 7, 2014 (inception) to December 31, 2014, the Company issued 1,351,763 and 2,649,457 common and incentive units, respectively, as compensation to certain employees, directors and consultants of the Company. During the six months ended June 30, 2015 (unaudited), the Company issued 1,293,705 incentive units as compensation to certain employees, directors and consultants of the Company. The units primarily vest 25% of the total units on the first anniversary of the vesting commencement date and then monthly, at the end of each subsequent month, over three years.

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The Company generally grants equity-based awards with service conditions only.

The following table summarizes the Company's compensatory common unit activity since inception:

	Number of Units	Weighted Average Grant Date Fair Value per Unit
Unvested common units as of May 7, 2014 (inception)	—	$ —
Issued	1,351,763	$ 0.37
Vested	(337,942)	$ (0.37)
Unvested common units as of December 31, 2014	1,013,821	$ 0.37
Unvested common units as of June 30, 2015 (unaudited)	1,013,821	$ 0.37

The following table summarizes the Company's compensatory incentive unit activity since inception:

	Number of Units	Weighted Average Grant Date Fair Value per Unit
Unvested incentive units as of May 7, 2014 (inception)	—	$ —
Issued	2,649,457	$ 0.22
Unvested incentive units as of December 31, 2014	2,649,457	$ 0.22
Issued	1,293,705	$ 0.79
Vested	(135,203)	$ (0.13)
Forfeited	(54,070)	$ (0.79)
Unvested incentive units as of June 30, 2015 (unaudited)	3,753,889	$ 0.41

The aggregate intrinsic value of common unit awards that vested during each of the periods from May 7, 2014 (inception) to December 31, 2014 and the six months ended June 30, 2015 (unaudited) was $0.1 million.

The Company recorded equity-based compensation expense related to common and incentive units in the following expense categories of its consolidated statements of operations and comprehensive loss:

	Period from May 7, 2014 (inception) to December 31, 2014	Six Months Ended June 30, 2015
	(in thousands)	(unaudited)
Research and development	$ 83	$ 132
General and administrative	225	134
	$ 308	$ 266

No unit-based compensation was recorded for the period from May 7, 2014 (inception) to June 30, 2014.

As of December 31, 2014, there was $1.1 million of unrecognized equity-based compensation related to common and incentive units that are expected to vest. These costs are expected to be recognized over a weighted average remaining vesting period of 3.5 years. As of June 30, 2015 (unaudited), there was $1.8 million of unrecognized equity-based compensation related to common and incentive units that are expected to vest. These costs are expected to be recognized over a weighted average remaining vesting period of 3.5 years.

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10. Loss per Unit

Basic and diluted loss per common unit and per incentive unit were calculated as follows:

	Period from May 7, 2014 (inception) to December 31, 2014	Period from May 7, 2014 (inception) to June 30, 2014	Six Months Ended June 30, 2015
		(in thousands, except per unit data) (unaudited)	(unaudited)
Net loss	$ (9,539)	$ (178)	$ (4,133)
Weighted average common units outstanding, basic and diluted	826	—	1,284
Net loss per common unit, basic and diluted	$ (11.55)	$ —	$ (2.96)
Weighted average incentive units outstanding, basic and diluted	—	—	112
Net loss per incentive unit, basic and diluted	$ —	$ —	$ (2.96)

The Company's Preferred Units have the right to participate in earnings and distributions of the Company but are not obligated to share in losses. As a result, in periods of net loss, the Company allocates losses on a pro rata basis to the holders of its Common Units and Incentive Units.

The following common stock equivalents have been excluded from the calculations of diluted loss per unit because their inclusion would have been antidilutive.

	Period from May 7, 2014 (inception) to December 31, 2014	Period from May 7, 2014 (inception) to June 30, 2014	Six Months Ended June 30, 2015
		(in thousands) (unaudited)	(unaudited)
Preferred units	19,349	—	20,682
Unvested common units	1,014	—	1,014
Unvested incentive units	2,649	—	3,754
	23,012	—	25,450

Unaudited Pro Forma Loss per Share

In August 2015, the Company completed a series of transactions pursuant to which Intellia Therapeutics, LLC merged with and into its C corporation subsidiary, Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing to exist as the surviving corporation. Refer to Note 12, *Subsequent Events*, for additional information regarding this merger. In connection with this merger, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC received shares of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units in Intellia Therapeutics, LLC received restricted common stock in Intellia Therapeutics, Inc. On September 1, 2015 the Company's board of directors authorized the Company to file a confidential draft registration statement with the Securities and Exchange Commission to sell shares of its common stock to the public. The unaudited pro forma basic and diluted loss per share for the period from May 7, 2014 (inception) to December 31, 2014 and for the six months ended June 30, 2015 give effect to the automatic conversion of all preferred units by treating all preferred units as if they had been converted to common stock on May 7, 2014 (inception) or on the issuance date of the preferred units, if later. Shares to be sold in the offering are excluded from the unaudited pro forma basic and diluted loss per share calculations. As each of the periods presented resulted in a net loss, there is no dilution attributed to pro forma weighted average shares outstanding in the calculation of pro forma diluted loss per share.

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	Period from May 7, 2014 (inception) to December 31, 2014	Six Months Ended June 30, 2015
	(in thousands, except per unit and per share data) (unaudited)	
Net loss	$ (9,539)	$ (4,133)
Weighted average common units outstanding, basic and diluted	826	1,284
Weighted average incentive units outstanding, basic and diluted	—	112
Pro forma adjustment for conversion of all units in the Reorganization and the subsequent assumed automatic conversion of all preferred stock into shares of common stock upon the closing of the proposed initial public offering	10,763	22,699
Pro forma weighted average common shares outstanding, basic and diluted	11,589	24,095
Pro forma net loss per share, basic and diluted	$ (0.82)	$ (0.17)

11. Related Party Transactions

In July 2014, the Company issued Caribou 8,110,599 Junior Preferred Units. As a result of this and related transactions, Caribou owned 33.7% and 31.2% of the Company's fully diluted equity as of December 31, 2014 and June 30, 2015 (unaudited), respectively. Refer to Note 6, *Commitments and Contingencies*, for additional information regarding these agreements.

During the period from May 7, 2014 (inception) to December 31, 2014, the Company recognized $6.1 million in in-process research and development expense and $0.2 million in research and development expense and, as of December 31, 2014, had recorded current and non-current obligations of $1.7 million related to the license and service agreements with Caribou. During the six months ended June 30, 2015 (unaudited), the Company recognized $0.8 million in research and development expense and, as of June 30, 2015 (unaudited), had recorded current and non-current obligations of $1.1 million related to the license and service agreements with Caribou.

In connection with its entry into a collaboration and license agreement and related equity transactions with Novartis, the Company issued Novartis 4,761,905 Class A-1 Preferred Units and 2,666,666 Class A-2 Preferred Units. As a result of these transaction, Novartis owned 28.9% and 26.8% of the Company's fully diluted equity as of December 31, 2014 and June 30, 2015 (unaudited), respectively. Refer to Note 8, *Collaboration*, for additional information regarding this collaboration agreement.

During the six months ended June 30, 2015 (unaudited), the Company recognized $2.7 million in collaboration revenue related to this collaboration. As of June 30, 2015 (unaudited), the Company had recorded accounts receivable of $2.0 million and deferred revenue of $11.7 million related to this collaboration.

From May 7, 2014 (inception) to September 2014, the Company received consulting and management services from Atlas Venture Advisors, Inc., which through its affiliate, Atlas, owned 18.5% of the Company's fully diluted equity as of December 31, 2014. The Company paid Atlas Venture Advisors, Inc. $0.3 million for these services, including reimbursement of expenses, in the period from May 7, 2014 (inception) to December 31, 2014.

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12. Subsequent Events

In January 2015, the Company completed the sale of 1,333,333 Class A Preferred Units to an existing investor at $1.50 per share.

Merger with Intellia Therapeutics, Inc.

On August 2015, the Company completed a series of transactions pursuant to which Intellia Therapeutics, LLC, the former sole stockholder and holding company parent, merged with and into Intellia Therapeutics, Inc., and Intellia Therapeutics, Inc. continued to exist as the surviving corporation. In connection with the Reorganization:

- holders of Intellia Therapeutics, LLC's outstanding Class A-2 Preferred Units received one share of Intellia Therapeutics, Inc. Series A-2 Preferred Stock for each Class A-2 Preferred Unit held immediately prior to the Reorganization, with an aggregate of 3,999,999 shares of Intellia Therapeutics, Inc. Series A-2 Preferred Stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Class A-1 Preferred Units received one share of Intellia Therapeutics, Inc. Series A-1 Preferred Stock for each Class A-1 Preferred Unit held immediately prior to the Reorganization, with an aggregate of 8,571,429 shares of Intellia Therapeutics, Inc. Series A-1 Preferred Stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Junior Preferred Units received one share of Intellia Therapeutics, Inc. Junior Preferred Stock for each Junior Preferred Unit held immediately prior to the Reorganization, with an aggregate of 8,110,599 shares of Intellia Therapeutics, Inc. Junior Preferred Stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Common Units received one share of Intellia Therapeutics, Inc. Founder Stock for each Common Unit held immediately prior to the Reorganization, with an aggregate of 2,298,000 shares of Intellia Therapeutics, Inc. Founder Stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Incentive Units received restricted shares of Intellia Therapeutics, Inc. Common Stock in an amount equal in value to the value of such Incentive Units as determined by the applicable provisions of the Intellia Therapeutics, LLC operating agreement in effect immediately prior to the Reorganization, with an aggregate of 4,349,919 shares of Intellia Therapeutics, Inc. restricted common stock issued in the Reorganization; and
- the Company's board of directors authorized the issuance of Series B Preferred Stock.

The Company's Series A-2 Preferred Stock, Series A-1 Preferred Stock, Junior Preferred Stock and Founder Stock are designated as Preferred Stock under its amended and restated certificate of incorporation. All outstanding shares of its Preferred Stock convert to shares of common stock on a one-for-1.0992035 basis.

The preferred stock issued in the merger has the following rights and preferences:

Conversion—Prior to any automatic conversion of the Preferred Stock in connection with the closing of the Company's initial public offering, each share of Preferred Stock is convertible, without the payment of additional consideration and at the option of the holder, into the number of shares of common stock determined by dividing the respective "Original Issue Price" for such series of Preferred Stock by the applicable conversion price then in effect for such series of Preferred Stock. The conversion prices for each series of Preferred Stock are subject to adjustment in the event of certain dilutive issuances of common stock or common stock equivalents in which such issuances are made without consideration or for consideration less than the pre-issuance conversion prices of the Preferred Stock, and, in such a case, the conversion prices are to be adjusted in proportion to the amount by which the consideration received for such dilutive issuance was less than the respective pre-issuance

conversion prices. The dilutive issuances that could trigger such an adjustment exclude issuances of common stock or common stock equivalents effected (i) as a dividend, distribution or stock split, (ii) under the Company's equity compensation plans or like arrangements, (iii) as a result of a qualified public offering, as defined, or in an initial public offering in which all shares of Preferred Stock would convert to common stock, as well as (iv) in contemplation of transactions or arrangements approved by the Board of Directors or holders of the Preferred Stock, as applicable.

All shares of Preferred Stock are automatically convertible into common stock upon the earlier of (i) the closing of an underwritten public offering in which the public offering price is at least $7.875 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) and the net proceeds raised equal or exceed $60.0 million, (ii) in connection with any other underwritten public offering with the election of the holders of at least 67% of the outstanding shares of Preferred Stock, voting together as a single class on an as-converted to common stock basis, and (iii) the election of the holders of at least 67% of the outstanding shares of Preferred Stock, voting together as a single class on an as-converted to common stock basis, and the holders of at least a majority of the outstanding shares of Series B Preferred Stock, voting together as a single class on an as-converted to common stock basis.

Voting Rights—The holders of Preferred Stock are entitled to vote as a single class with the holders of common stock on all matters and are entitled to the number of votes equal to the number of whole shares of common stock into which the shares of the particular series of Preferred Stock are convertible. The holders of Series B Preferred Stock, voting together as a single class on an as-converted to common stock are entitled to elect on director to the Company's board of directors, the holders of Series A-1 Preferred Stock and Series A-2 Preferred Stock, voting together as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors, the holders of Junior Preferred Stock, voting together as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors and the holders of Preferred Stock and the holders of common stock, voting together as a single class on an as-converted to common stock basis, are entitled to elect the remaining directors.

Dividends—The holders of Preferred Stock are entitled to receive non-cumulative dividends in preference to any dividends on common stock, in each case, only when and if declared by the Company's board of directors.

Liquidation Preference—In the event of any liquidation, dissolution or winding-up of the Company, including a deemed liquidation event, as defined in the Company's certificate of incorporation to include certain mergers or a disposition of all or substantially all the assets of the Company (a "Deemed Liquidation Event"), the holders of Series B Preferred Stock are entitled to receive from any assets legally available for distribution, the Series B Original Issue Price for each share of Series A-1 Preferred Stock held by such holder, plus any dividends declared but unpaid thereon (the "Series B Liquidation Preference"). If the available assets are insufficient to pay the holders of Series B Preferred Stock the full amount to which they are entitled, the holders of Series B Preferred Stock are to share ratably in any distribution of the assets available for distribution in proportion to the respective amounts that would otherwise have been payable if such amounts are paid in full. After satisfaction of the Series B Liquidation Preference, the holders of Series A-1 Preferred Stock and Series A-2 Preferred Stock, on a *pari passu* basis, are entitled to receive from any assets legally available for distribution, the Series A-1 Original Issue Price for each share of Series A-1 Preferred Stock held by such holder and the Series A-2 Original Issue Price for each share of Series A-2 Preferred Stock held by such holder, plus, in each case, any dividends declared but unpaid thereon (the "Series A Liquidation Preference"). If the available assets are insufficient to pay the holders of Series A-1 Preferred Stock and Series A-2 Preferred Stock the full amount to which they are entitled, the holders of Series A-1 Preferred Stock and Series A-2 Preferred Stock are to share ratably in any distribution of the assets available for distribution in proportion to the respective amounts that would otherwise have been payable if such amounts are paid in full. After satisfaction of the Series B Liquidation Preference and the Series A Liquidation Preferences, the holders of Junior Preferred Stock are

entitled to receive from any assets legally available for distribution, the Junior Preferred Original Issue Price for each share of Junior Preferred Stock held by such holder, plus, in each case, any dividends declared but unpaid thereon (the "Junior Liquidation Preferences"). After satisfaction of the Series B Liquidation Preference, the Series A Liquidation Preference and the Junior Preferred Preference, the holders of Founder Stock are entitled to receive from any assets legally available for distribution, the Founder Stock Original Issue Price for each share of Founder Stock held by such holder, plus, in each case, any dividends declared but unpaid thereon (the "Founder Stock Liquidation Preference"). After satisfaction of the Series B Liquidation Preference, the Series A Liquidation Preference, the Junior Preferred Preference, and the Founder Stock Preference, any remaining assets legally available for distribution are to be distributed among the holders of Series A-2 Preferred Stock, Series A-1 Preferred Stock, Junior Preferred Stock, Founder Stock, and common stock pro rata based on the number of shares of common stock held by each, assuming full conversion of all outstanding shares of Series A-2 Preferred Stock, Series A-1 Preferred Stock and Junior Preferred Stock.

The Preferred Stock has no redemption rights.

Issuance of Series B Preferred Stock

In August 2015, the Company issued 13,336,601 shares of Series B Preferred Stock at an issuance price of $5.25 per share for gross proceeds of $70.0 million.

The rights and preferences of the Series B preferred stock are similar to those of the other series of preferred stock, except that, specifically, (1) the majority of the outstanding shares of Series B Preferred Stock, voting together as a single class on an as-converted to common stock basis, has the ability to control the election of the holders of Preferred Stock to convert to common, (2) the Series B preferred stockholders, voting together as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors, and (3) the Series B preferred stockholders are entitled to first preference in the event of a liquidation.


Intellia
THERAPEUTICS

PART II

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the fees and expenses, other than underwriting discounts and commissions, payable in connection with the registration of the common stock hereunder. All amounts are estimates except the SEC registration fee.

	Amount to be Paid
SEC registration fee	*
FINRA filing fee	*
NASDAQ Global Market listing fee	*
Printing and mailing	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous	*
Total	$ *

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the "DGCL") authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our certificate of incorporation to be in effect upon the closing of this offering and bylaws to be in effect upon the effectiveness of the registration statement of which this prospectus is a part that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and intend to enter into such agreements with certain of our executive officers. These agreements provide that we will indemnify each of our directors, certain of our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us or in furtherance of our rights. Additionally, certain of our directors or officers may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates or other third parties, which indemnification relates to and might apply to the same proceedings arising out of such director's or officer's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors or officers are primary and any obligation of such affiliates or other third parties to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended (the "Securities Act").

The underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification of us and our directors and officers by the underwriters against certain liabilities under the Securities Act and the Securities Exchange Act of 1934.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities sold by us in the past three years. No underwriters were involved in the sales and the certificates representing the securities sold and issued contain legends restricting transfer of the securities without registration under the Securities Act or an applicable exemption from registration.

(a) Reorganization

On August 20, 2015, Intellia Therapeutics, LLC, a Delaware limited liability company, merged with and into Intellia Therapeutics, Inc., a Delaware corporation. We refer to the series of transactions related to Intellia Therapeutics, LLC's merger with and into us as the Reorganization. As a result of the Reorganization, incentive units of Intellia Therapeutics, LLC were converted into shares of our common stock; Common Units of Intellia Therapeutics, LLC were converted into shares of our Founder Stock; Junior Preferred Units of Intellia Therapeutics, LLC were converted into shares of our Junior Preferred Stock; Class A-1 Preferred Units of Intellia Therapeutics, LLC were converted into shares of our Series A-1 Preferred Stock; and Class A-2 Preferred Units of Intellia Therapeutics, LLC were converted into shares of our Series A-2 Preferred Stock. The Reorganization was effected pursuant to an Agreement and Plan of Merger between Intellia Therapeutics, LLC and Intellia Therapeutics, Inc. and did not constitute a sale for purposes of the Securities Act.

(b) Sales of Securities

The following list sets forth information regarding all unregistered securities sold by us since our inception on May 7, 2014.

1. On June 19, 2014, we issued and sold 1,000 shares of our common stock, or the Atlas Common Shares, to Atlas Venture Fund IX, L.P., or Atlas Venture Fund IX, for aggregate consideration of $0.1 million.

2. On July 16, 2014, Intellia Therapeutics, LLC issued and sold preferred securities since converted into an aggregate of 2,857,142 shares of our Series A-1 Preferred Stock to Atlas Venture Fund IX in exchange for $2.9 million in cash and the Atlas Common Shares.

3. On July 16, 2014, Intellia Therapeutics, LLC issued preferred securities since converted into 8,110,599 shares of our Junior Preferred Stock to Caribou Therapeutics Holdco, LLC, a holding company owned and managed by Caribou Biosciences, Inc., or Caribou. In exchange for such shares, Caribou Therapeutics Holdco, LLC contributed to Intellia Therapeutics, LLC all of its membership interests of Intellia, LLC, a holding company that was the original party to a license agreement with Caribou, dated July 16, 2014.

4. On July 31, 2014, Intellia Therapeutics, LLC issued to Atlas Venture Fund IX preferred securities since converted into an aggregate of 946,237 shares of founder stock as of August 31, 2015.

5. Between September 17, 2014 and January 28, 2015, in connection with a preferred securities financing, Intellia Therapeutics, LLC issued to Atlas Venture Fund IX and Novartis Institutes for Biomedical Research, Inc., or Novartis, in a series of closings, preferred securities since converted into an aggregate of 5,714,287 shares of our Series A-1 Preferred Stock and 3,999,999 shares of our Series A-2 Preferred Stock for aggregate consideration of $6.0 million and $6.0 million, respectively.

6. On August 20, 2015, we issued and sold an aggregate of 13,336,601 shares of our Series B Preferred Stock to 28 accredited investors at a per share purchase price of $5.25 for aggregate gross consideration of $70.0 million.

7. Between July 31, 2014 and July 31, 2015, Intellia Therapeutics, LLC issued to certain of our employees, consultants and scientific advisory board members equity representing an aggregate of 4,349,919 shares of restricted common stock and 1,351,763 shares of our founder stock, in each case as of August 31, 2015, in exchange for their services to us.

We deemed the offers, sales and issuances of the securities described in paragraphs (1) through (6) above to be exempt from registration under the Securities Act, in reliance on Section 4(a)(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, regarding transactions by an issuer not involving a public offering. All purchasers of securities in transactions exempt from registration pursuant to Regulation D represented to us that they were accredited investors and were acquiring the shares for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

We deemed the issuances of our common stock and our founder stock described in paragraph (7) to be exempt from registration under the Securities Act in reliance on Rule 701 of the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

Item 16. Exhibits and Financial Statement Schedules.

The exhibits to the registration statement are listed in the Exhibit Index to this registration statement and are incorporated herein by reference.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The Registrant hereby undertakes that:

(a) The Registrant will provide to the underwriter at the closing as specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

(b) For purposes of determining any liability under the Securities Act of 1933, as amended, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933, as amended, shall be deemed to be part of this registration statement as of the time it was declared effective.

(c) For the purpose of determining any liability under the Securities Act of 1933, as amended, 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.

(d) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(e) For the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on the day of , 2015.

INTELLIA THERAPEUTICS, INC.

By: _____

Nessan Bermingham, Ph.D.
Founder, President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

Each individual whose signature appears below hereby constitutes and appoints each of Nessan Bermingham, Ph.D. and José E. Rivera, J.D. and as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement (or any Registration Statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement and Power of Attorney has been signed by the following person in the capacities and on the date indicated.

Name	Title	Date
_____ Nessan Bermingham, Ph.D.	Founder, President, Chief Executive Officer and Director *(Principal Executive Officer)*	, 2015
_____ Sapna Srivastava, Ph.D.	Chief Financial and Strategy Officer *(Principal Financial and Accounting Officer)*	, 2015
_____ Jean François Formela, M.D.	Director	, 2015
_____ Carl L. Gordon, Ph.D.	Director	, 2015
_____ Rachel Haurwitz, Ph.D.	Director	, 2015
_____ John M. Leonard, M.D.	Chief Medical Officer and Director	, 2015

EXHIBIT INDEX

Exhibit No.	Exhibit Index
1.1*	Form of Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect
3.2*	Form of Second Amended and Restated Certificate of Incorporation of the Registrant (to be effective upon pricing of this offering)
3.3*	Form of Third Amended and Restated Certificate of Incorporation of the Registrant (to be effective upon completion of this offering)
3.4	Amended and Restated By-laws of the Registrant, as currently in effect
3.5*	Form of Second Amended and Restated By-laws (to be in effective upon completion of this offering)
4.1*	Specimen Common Stock Certificate
4.2	Investor Rights Agreement among the Registrant and certain of its stockholders, dated August 20, 2015
5.1*	Opinion of Goodwin Procter LLP
10.1*#	2015 Amended and Restated Stock Option and Incentive Plan and forms of award agreements thereunder
10.3†	License Agreement dated as of July 16, 2014 by and between the Registrant (as successor in interest of Intellia Therapeutics, LLC) and Caribou Biosciences, Inc.
10.4†	Services Agreement dated as of July 16, 2014 by and between the Registrant (as successor in interest of Intellia Therapeutics, LLC) and Caribou Biosciences, Inc.
10.5†	License and Collaborative Research Agreement dated as of December 18, 2014 by and between the Registrant and Novartis Institutes for BioMedical Research, Inc.
10.6*	Form of Indemnification Agreement
10.7	Lease Agreement, by and between the Registrant and MIT 130 Brookline LLC, dated as of October 21, 2014
21.1	Subsidiaries of the Registrant
23.1*	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included in page II-6)

* To be included by amendment

† Application has been made to the Securities and Exchange Commission for confidential treatment of certain provisions. Omitted material for which confidential treatment has been requested has been filed separately with the Securities and Exchange Commission.

\# Indicates a management contract or any compensatory plan, contract or arrangement

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF INTELLIA THERAPEUTICS, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Intellia Therapeutics, 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 Intellia Therapeutics, Inc. and that this corporation was originally incorporated pursuant to the General Corporation Law on May 7, 2014 under the name AZRN, Inc. The original certificate of incorporation was amended pursuant to the General Corporation Law through the filing of a Certificate of Amendment dated as of July 29, 2014.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Intellia Therapeutics, Inc. (the "**Corporation**").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of its registered agent at such address is The Corporation Trust Company.

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.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 50,000,000 shares of Common Stock, $0.0001 par value per share ("**Common Stock**") and (ii) 36,500,000 shares of Preferred Stock, $0.0001 par value per share ("**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 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 this Amended and Restated Certificate of Incorporation (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

13,519,973 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series B Preferred Stock**," 3,999,999 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series A-2 Preferred Stock**," 8,571,429 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series A-1 Preferred Stock**," 8,110,599 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Junior Preferred Stock**," and 2,298,000 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Founder Stock**," with each such series having the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "sections" or "subsections" in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth. The Series B Preferred Stock, Series A-2 Preferred Stock, Series A-1 Preferred Stock, Junior Preferred Stock and Founder Stock are referred to collectively herein as the "**Series Preferred Stock**." The Series B Preferred Stock, Series A-2 Preferred Stock, Series A-1 Preferred Stock and Junior Preferred Stock are referred to collectively herein as the "**Senior / Junior Preferred Stock**." The Series B Preferred Stock, Series A-2 Preferred Stock and Series A-1 Preferred Stock are referred to collectively herein as the "**Senior Preferred Stock**." The Series A-2 Preferred Stock and Series A-1 Preferred Stock are referred to collectively herein as the "**Series A Preferred Stock**."

1. Dividends.

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 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 Preferred Stock

then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series Preferred Stock in an amount at least equal to (i) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series Preferred Stock as would equal the product of (A) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (B) the number of shares of Common Stock issuable upon conversion of a share of Series Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series Preferred Stock determined by (A) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (B) multiplying such fraction by an amount equal to the applicable Series Original Issue Price (as defined below); 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 Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series Preferred Stock dividend. The Corporation shall make no dividends to the holders of shares of Common Stock except in accordance with this Section 1.

The "**Series Original Issue Price**" shall mean, collectively, $5.25 per share of Series B Preferred Stock ("**Series B Original Issue Price**"), $1.50 per share of Series A-2 Preferred Stock ("**Series A-2 Original Issue Price**"), $1.05 per share of Series A-1 Preferred Stock ("**Series A-1 Original Issue Price**"), $1.05 per share of Junior Preferred Stock ("**Junior Preferred Original Issue Price**") or $1.05 per share of Founder Stock ("**Founder Original Issue Price**"), as applicable and in each case subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the applicable series of Series Preferred Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock.

2.1.1 Preferential Payments to Holders of Series B 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), 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, Junior Preferred Stock, Founder Stock and Common Stock by reason of their ownership thereof, an amount per share equal to the applicable Series 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 Subsection 2.1.1, 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.

2.1.2 Preferential Payments to Holders of Series A Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after payment of all preferential amounts required to be paid to the holders of shares of Series B Preferred Stock pursuant to Subsection 2.1.1 above, the holders of shares of Series A Preferred Stock then outstanding shall be entitled on a pari passu basis 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 Junior Preferred Stock, Founder Stock and Common Stock by reason of their ownership thereof, an amount per share equal to the applicable Series 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 A Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1.2, the holders of shares of Series A 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 Preferential Payments to Holders of Junior Preferred Stock. 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 Series B Preferred Stock and Series A Preferred Stock pursuant to Subsection 2.1.1 and Subsection 2.1.2 above, the holders of shares of Junior 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 Founder Stock and Common Stock by reason of their ownership thereof, an amount per share equal to the Junior Preferred 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 Junior Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1.3, the holders of shares of Junior 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.

2.1.4 Preferential Payments to Holders of Founder Stock. 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 Series B Preferred Stock, Series A Preferred Stock and Junior Preferred Stock pursuant to Subsection 2.1.1, Subsection 2.1.2 and Subsection 2.1.3 above, the holders of shares of Founder 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 Common Stock by reason of their ownership thereof, an amount per share equal to the Founder 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 Founder Stock the full amount to which they shall be entitled under this Subsection 2.1.4, the holders of shares of Founder 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.

2.2 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 Series Preferred Stock pursuant to Subsection 2.1.1, Subsection 2.1.2, Subsection 2.1.3 and Subsection 2.1.4 above, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Series 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. The aggregate amount which a holder of a share of Series B Preferred Stock is entitled to receive under Subsections 2.1 and 2.2 is hereinafter referred to as the "**Series B Liquidation Amount**." The aggregate amount which a holder of a share of Series A-2 Preferred Stock is entitled to receive under Subsections 2.1 and 2.2 is hereinafter referred to as the "**Series A-2 Liquidation Amount**." The aggregate amount which a holder of a share of Series A-1 Preferred Stock is entitled to receive under Subsections 2.1 and 2.2 is hereinafter referred to as the "**Series A-1 Liquidation Amount**." The aggregate amount which a holder of a share of Junior Preferred Stock is entitled to receive under Subsections 2.1 and 2.2 is hereinafter referred to as the "**Junior Preferred Liquidation Amount**." The aggregate amount which a holder of a share of Founder Stock is entitled to receive under Subsections 2.1 and 2.2 is hereinafter referred to as the "**Founder Liquidation Amount**." The aggregate amount which a holder of a share of any Series Preferred Stock is entitled to receive under Subsections 2.1 and 2.2 is hereinafter referred to as the applicable "**Series Liquidation Amount**."

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless both (i) holders of at least sixty-seven percent (67%) of the combined voting power of the Senior / Junior Preferred Stock (calculated on an as-converted to Common Stock basis) (the "**Required Holders**") and (ii) holders of at least a majority of the then outstanding shares of Series B Preferred Stock elect otherwise by written notice sent to the Corporation at least ten (10) business days prior to the effective date of any such event:

(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; or

(b) 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 of the assets of the Corporation and its subsidiaries taken as a whole or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries 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 Subsection 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 Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 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 Series 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 Series Preferred Stock, and (iii) if (1) the Required Holders and (2) holders of at least a majority of the then outstanding shares of Series B Preferred Stock 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 Delaware 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 Series Preferred Stock at a price per share equal to the applicable Series 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 Series Preferred Stock, the Corporation shall ratably redeem each holder's shares of Series 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 Delaware law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Subsection 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.

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 merger, consolidation, sale, transfer, exclusive license, other disposition or redemption 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.

2.3.4 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Subsection 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 Subsections 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 Subsections 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 Subsection 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 meeting), each holder of outstanding shares of Series 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 Series 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 Series Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of (a) the shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the "**Series B Director**"), (b) the shares of Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the "**Series A Director**" and together with the Series B Director, the "**Preferred Directors**"), and (c) the shares of Junior Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Series Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. Any director elected as provided in the preceding two sentences 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 such stockholders. If the holders of shares of Series 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, pursuant to this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Series 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 Subsection 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 Subsection 3.2.

3.3 Senior / Junior Preferred Stock Protective Provisions. At any time when shares of Senior / Junior 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 Required Holders, given in writing or by vote at a meeting, 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 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 acquire another entity, whether through a merger or consolidation with such entity, the purchase of such entity's outstanding shares of capital stock, or the purchase, lease, exclusive license or other receipt by the Corporation or any of its subsidiaries, in a single transaction or series of related transaction, of all or substantially all of the assets of such entity;

3.3.3 amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation;

3.3.4 create or authorize the creation of or issue or obligate itself to issue any other security convertible into or exercisable for any equity security, having rights, preferences or privileges senior to or on parity with any series of Senior / Junior Preferred Stock;

3.3.5 reclassify, alter or amend any existing security of the Corporation that is junior to or pari passu with any series of Senior / Junior Preferred Stock, if such reclassification, alteration or amendment would render such other security senior to or on parity with any series of Senior / Junior Preferred Stock;

3.3.6 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay any dividend on any shares of capital stock of the Corporation prior to payment to the Senior / Junior Preferred Stock other than repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof;

3.3.7 create, or authorize the creation of, or issue, or authorize the issuance of any debt security, or permit any subsidiary to take any such action with respect to any debt security, if the aggregate indebtedness of the Corporation and its subsidiaries for borrowed money following such action would exceed $250,000, other than equipment leases or bank lines of credit approved by the Board of Directors (including the Preferred Directors);

3.3.8 amend or waive any of the rights, preferences, powers or privileges of the Senior / Junior Preferred Stock;

3.3.9 increase or decrease the authorized shares of any series of Senior / Junior Preferred Stock;

3.3.10 (a) create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, (b) sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or (c) permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

3.3.11 guarantee, directly or indirectly, or permit any subsidiary to guarantee, directly or indirectly, any indebtedness except for trade accounts of the Corporation or any subsidiary arising in the ordinary course of business;

3.3.12 increase or decrease the authorized number of directors constituting the Board of Directors; or

3.3.13 incur any aggregate indebtedness in excess of $250,000 that is not already included in a budget approved by the Board of Directors (including the Preferred Directors), other than trade credit incurred in the ordinary course of business.

3.4 Series B Preferred Stock Protective Provisions. At any time when shares of Series B 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 at least a majority of the then-outstanding Series B Preferred Stock, given in writing or by vote at a meeting, 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 amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series B Preferred Stock; provided, however, that the terms of this Subsection 3.4.1 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation;

3.4.2 waive any of the rights of the Series B Preferred Stock provided for in the Certificate of Incorporation of the Corporation; or

3.4.3 issue additional Series B Preferred Stock to any person other than the holders of Series B Preferred Stock; provided, however, that the terms of this Subsection 3.4.3 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation.

3.5 Series A Preferred Stock Protective Provisions. At any time when shares of Series A 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 sixty percent (60%) of the then-outstanding Series A Preferred Stock, given in writing or by vote at a meeting, 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:

3.5.1 amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series A Preferred Stock; provided, however, that the terms of this Subsection 3.5.1 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation;

3.5.2 waive any of the rights of the Series A Preferred Stock provided for in the Certificate of Incorporation of the Corporation; or

3.5.3 issue additional Series A Preferred Stock to any person other than the holders of Series A Preferred Stock; provided, however, that the terms of this Subsection 3.5.3 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation.

3.6 Junior Preferred Stock Protective Provisions. At any time when shares of Junior 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 a majority of the then-outstanding Junior Preferred Stock, given in writing or by vote at a meeting, 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:

3.6.1 amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation in a manner that adversely affects the powers, preferences or rights of the Junior Preferred Stock; provided, however, that the terms of this Subsection 3.6.1 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation;

3.6.2 waive any of the rights of the Junior Preferred Stock provided for in the Certificate of Incorporation of the Corporation; or

3.6.3 issue additional Junior Preferred Stock to any person other than the holders of Junior Preferred Stock; provided, however, that the terms of this Subsection 3.6.3 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation.

3.7 Founder Stock Protective Provisions. At any time when shares of Founder 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 a majority of the then-outstanding Founder Stock, given in writing or by vote at a meeting, 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:

3.7.1 amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation in a manner that adversely affects the powers, preferences or rights of the Founder Stock; provided, however, that the terms of this Subsection 3.7.1 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation;

3.7.2 waive any of the rights of the Founder Stock provided for in the Certificate of Incorporation of the Corporation; or

3.7.3 issue additional Founder Stock to any person other than the holders of Founder Stock; provided, however, that the terms of this Subsection 3.7.3 shall not otherwise limit or affect the Corporation's ability to issue equity or other securities and to make correlative amendments to the terms of the Corporation's Certificate of Incorporation.

4. Optional Conversion.

The holders of the Series Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Series 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 Series Original Issue Price by the applicable Series Conversion Price (as defined below) in effect at the time of conversion. The "**Series B Conversion Price**" shall initially be equal to $4.776185665. The "**Series A-2 Conversion Price**" shall initially be equal to $1.364624476. The "**Series A-1 Conversion Price**" shall initially be equal to $0.955237133. The "**Junior Preferred Conversion Price**" shall initially be equal to $0.955237133. The "**Founder Conversion Price**" shall initially be equal to $0.955237133. The "**Series Conversion Price**" shall be the Series B Conversion Price, the Series A-2 Conversion Price, the Series A-1

Conversion Price, the Junior Preferred Conversion Price or the Founder Conversion Price, as applicable. Such initial Series Conversion Price, and the rate at which shares of Series 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 Series Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series 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 Series 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 Series Preferred Stock to voluntarily convert shares of Series Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Series Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Series Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Series 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 Series Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any 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 notice and, if applicable, such certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares 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 Series Preferred Stock, or to his, her or its 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 Series Preferred Stock represented by the surrendered certificate that were not

converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 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 Series Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series 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 the Series 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 Series 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 the Series 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 Series Conversion Price below the then-applicable par value of the shares of Common Stock issuable upon conversion of the Series 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 adjusted Series Conversion Price.

4.3.3 Effect of Conversion. All shares of Series 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 Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Series 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 Series Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series Conversion Price shall be made for any declared but unpaid dividends on the Series 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 Series 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 Series 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 Series 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 B 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 Subsection 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 Series 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 Subsection 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, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation (including a majority of the Preferred Directors); or

(vii) 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).

4.4.2 No Adjustment of Series Conversion Price. No adjustment in the Series 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 the Required Holders agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock, provided, however, that if such Additional Shares of Common Stock are issued at a price above the Series A-2 Original Issue Price but below the Series B Original Issue Price, such notice must include agreement from holders of a majority of the Series B Preferred 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 the Series Conversion Price pursuant to the terms of Subsection 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 Series 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 Series 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 Series Conversion Price to an amount which exceeds the lower of (i) the Series 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 Series 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 Series Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Series 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 Subsection 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 Series Conversion Price pursuant to the terms of Subsection 4.4.4, the Series Conversion Price shall be readjusted to such Series 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 the Series Conversion Price provided for in this Subsection 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 Subsection 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 Series Conversion Price that would result under the terms of this Subsection 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 Series Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Series 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 Subsection 4.4.3), without consideration or for a consideration per share less than the Series Conversion Price of any series of Senior / Junior Preferred Stock in effect immediately prior to such issue, then the Series Conversion Price of such Senior / Junior Preferred Stock shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = (CP_1 * (A + B)) / (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP_2" shall mean the Series Conversion Price of such series of Senior / Junior Preferred Stock in effect immediately after such issue of Additional Shares of Common Stock;

(b) "CP_1" shall mean the Series Conversion Price of such series of Senior / Junior Preferred Stock 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 Series 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 Subsection 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; 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.

(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 Subsection 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 Series Conversion Price pursuant to the terms of Subsection 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 Series 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 Series 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 Series 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 subsection 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 Series 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 Series 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 Series Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter such Series Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Series 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 Series 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 Series 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 Series 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 Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.5, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series 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 share of Series 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 Series 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 Series 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 Series Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series 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 ten (10) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series 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 Series Preferred Stock (but in any event not later than ten (10) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series 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 Series 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 Series 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; or

(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 Series 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 Series 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 Series Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of the sale of shares of Common Stock to the public at a price of at least $7.875 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, resulting in at least $60,000,000.00 of gross proceeds, net of the underwriting discount and commissions, to the Corporation (a "**Qualified IPO**"), (b) if approved by the Required Holders, the closing of the sale of shares of 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, other than in a Qualified IPO or (c) the date and time, or the occurrence of any other event, specified by vote or written consent of (x) the Required Holders and (y) holders of at least a majority of the then outstanding shares of Series B Preferred Stock (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**"), then (i) all outstanding shares of Series Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate as calculated pursuant to Subsection 4.1.1 and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Series Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series 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 Series 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 Series Preferred Stock converted pursuant to Subsection 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 Subsection 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 Series Preferred Stock, the Corporation shall (a) 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 and (b) pay cash as provided in Subsection 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 Series Preferred Stock converted. Such converted Series 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 Series Preferred Stock accordingly.

6. Redeemed or Otherwise Acquired Shares. Any shares of Series 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 Series Preferred Stock following redemption.

7. Waiver. Except as otherwise expressly provided herein, any of the rights, powers, preferences and other terms of the Series Preferred Stock set forth herein may be waived on behalf of all holders of Series Preferred Stock by the affirmative written consent or vote of the Required Holders.

8. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Series 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 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 Series Preferred Stock or any partner, member, director, stockholder, employee 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. An Excluded Opportunity shall not include any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of any Covered Persons, to the extent such individuals have a separate legal obligation to offer such opportunity to the Corporation.

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 Delaware 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.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 20th day of August, 2015.

By: /s/ Nessan Bermingham
Nessan Bermingham
Chief Executive Officer

Exhibit 3.4

AMENDED AND RESTATED BY-LAWS

of

INTELLIA THERAPEUTICS, INC.

(f/k/a AZRN, INC.)

(the "Corporation")

1. Stockholders

(a) Annual Meeting. The annual meeting of stockholders shall be held for the election of directors each year at such place, date and time as shall be designated by the Board of Directors. Any other proper business may be transacted at the annual meeting. If no date for the annual meeting is established or said meeting is not held on the date established as provided above, a special meeting in lieu thereof may be held or there may be action by written consent of the stockholders on matters to be voted on at the annual meeting, and such special meeting or written consent shall have for the purposes of these By-laws or otherwise all the force and effect of an annual meeting.

(b) Special Meetings. Special meetings of stockholders may be called by the Chief Executive Officer, if one is elected, or, if there is no Chief Executive Officer, a President, or by the Board of Directors, but such special meetings may not be called by any other person or persons. The call for the meeting shall state the place, date, hour and purposes of the meeting. Only the purposes specified in the notice of special meeting shall be considered or dealt with at such special meeting.

(c) Notice of Meetings. Whenever stockholders are required or permitted to take any action at a meeting, a notice stating the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present and vote at such meeting, and, in the case of a special meeting, the purpose or purposes of the meeting, shall be given by the Secretary (or other person authorized by these By-laws or by law) not less than ten (10) nor more than sixty (60) days before the meeting to each stockholder entitled to vote thereat and to each stockholder who, under the Certificate of Incorporation or under these By-laws is entitled to such notice. If mailed, notice is given when deposited in the mail, postage prepaid, directed to such stockholder at such stockholder's address as it appears in the records of the Corporation. Without limiting the manner by which notice otherwise may be effectively given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law (the "DGCL").

If a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place, if any, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken, except that if the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

(d) Quorum. The holders of a majority in interest of all stock issued, outstanding and entitled to vote at a meeting, present in person or represented by proxy, shall constitute a quorum. Any meeting may be adjourned from time to time by a majority of the votes properly cast upon the question, whether or not a quorum is present. The stockholders present at a duly constituted meeting may continue to transact business until adjournment notwithstanding the withdrawal of enough stockholders to reduce the voting shares below a quorum.

(e) Voting and Proxies. Except as otherwise provided by the Certificate of Incorporation or by law, each stockholder entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of stock held by such stockholder which has voting power upon the matter in question. 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 either written proxy or by a transmission permitted by Section 212(c) of the DGCL, but no proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period or is irrevocable and coupled with an interest. Proxies shall be filed with the Secretary of the meeting, or of any adjournment thereof. Except as otherwise limited therein, proxies shall entitle the persons authorized thereby to vote at any adjournment of such meeting.

(f) Action at Meeting. When a quorum is present, any matter before the meeting shall be decided by vote of the holders of a majority of the shares of stock voting on such matter except where a larger vote is required by law, by the Certificate of Incorporation or by these By-laws. Any election of directors by stockholders shall be determined by a plurality of the votes cast, except where a larger vote is required by law, by the Certificate of Incorporation or by these By-laws. The Corporation shall not directly or indirectly vote any share of its own stock; provided, however, that the Corporation may vote shares which it holds in a fiduciary capacity to the extent permitted by law.

(g) Presiding Officer. Meetings of stockholders shall be presided over by the Chairman of the Board, if one is elected, or in his or her absence, the Vice Chairman of the Board, if one is elected, or if neither is elected or in their absence, a President. The Board of Directors shall have the authority to appoint a temporary presiding officer to serve at any meeting of the stockholders if the Chairman of the Board, the Vice Chairman of the Board or a President is unable to do so for any reason.

(h) Conduct of Meetings. The Board of Directors may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board of Directors, the presiding officer of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the presiding officer of the meeting, may include, without limitation, the following: (i) the

establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the Corporation, their duly authorized and constituted proxies or such other persons as the chairman of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the Board of Directors or the presiding officer of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

(i) Action without a Meeting. Unless otherwise provided in the Certificate of Incorporation, any action required or permitted by law to be taken at any annual or special meeting of 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, by hand or by certified mail, return receipt requested, or to the Corporation's principal place of business or to the officer of the Corporation having custody of the minute book. Every written consent shall bear the date of signature and no written consent shall be effective unless, within sixty (60) days of the earliest dated consent delivered pursuant to these By-laws, written consents signed by a sufficient number of stockholders entitled to take action are delivered to the Corporation in the manner set forth in these By-laws. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

(j) Stockholder Lists. The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (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 1(j) 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 ten (10) days prior to the meeting in the manner provided by law. The list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law.

2. Directors

(a) Powers. The business of the Corporation shall be managed by or under the direction of a Board of Directors who may exercise all the powers of the Corporation except as otherwise provided by law, by the Certificate of Incorporation or by these By-laws. In the event of a vacancy in the Board of Directors, the remaining directors, except as otherwise provided by law, may exercise the powers of the full Board until the vacancy is filled.

(b) Number and Qualification. Unless otherwise provided in the Certificate of Incorporation or in these By-laws, the number of directors which shall constitute the whole board shall be determined from time to time by resolution of the Board of Directors. Directors need not be stockholders.

(c) Vacancies; Reduction of Board. A majority of the directors then in office, although less than a quorum, or a sole remaining Director, may fill vacancies in the Board of Directors occurring for any reason and newly created directorships resulting from any increase in the authorized number of directors. In lieu of filling any vacancy, the Board of Directors may reduce the number of directors.

(d) Tenure. Except as otherwise provided by law, by the Certificate of Incorporation or by these By-laws, directors shall hold office until their successors are elected and qualified or until their earlier resignation or removal. Any director may resign at any time upon notice given in writing or by electronic transmission to the Corporation. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

(e) Removal. To the extent permitted by law, a director may be removed from office with or without cause by vote of the holders of a majority of the shares of stock entitled to vote in the election of directors.

(f) Meetings. Regular meetings of the Board of Directors may be held without notice at such time, date and place as the Board of Directors may from time to time determine. Special meetings of the Board of Directors may be called, orally or in writing, by the Chief Executive Officer, if one is elected, or, if there is no Chief Executive Officer, the President, or by two or more Directors, designating the time, date and place thereof. Directors may participate in meetings of the Board of Directors by means of conference telephone or other communications equipment by means of which all directors participating in the meeting can hear each other, and participation in a meeting in accordance herewith shall constitute presence in person at such meeting.

(g) Notice of Meetings. Notice of the time, date and place of all special meetings of the Board of Directors shall be given to each director by the Secretary, or Assistant Secretary, or in case of the death, absence, incapacity or refusal of such persons, by the officer or one of the directors calling the meeting. Notice shall be given to each director in person, by telephone, or by facsimile, electronic mail or other form of electronic communications, sent to such director’s business or home address at least twenty-four (24) hours in advance of the meeting, or by written notice mailed to such director’s business or home address at least forty-eight (48) hours in advance of the meeting.

(h) Quorum. At any meeting of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business. Less than a quorum may adjourn any meeting from time to time and the meeting may be held as adjourned without further notice.

(i) Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, unless otherwise provided in the following sentence, a majority of the directors present may take any action on behalf of the Board of Directors, unless a larger number

is required by law, by the Certificate of Incorporation or by these By-laws. So long as there are two (2) or fewer Directors, any action to be taken by the Board of Directors shall require the approval of all Directors.

(j) Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if all members of the Board of Directors consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the records of the meetings of the Board of Directors. 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.

(k) Committees. The Board of Directors may, by resolution passed by a majority of the whole Board of Directors, establish one or more committees, each committee to consist of one or more directors. 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 thereof 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.

Any such committee, to the extent permitted by law and 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 the following: (i) approving or 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 provision of these By-laws.

Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but in the absence of such rules its business shall be conducted so far as possible in the same manner as is provided in these By-laws for the Board of Directors. All members of such committees shall hold their committee offices at the pleasure of the Board of Directors, and the Board may abolish any committee at any time.

3. Officers

(a) Enumeration. The officers of the Corporation shall consist of one or more Presidents (who, if there is more than one, shall be referred to as Co-Presidents), a Secretary, and such other officers, including, without limitation, a Treasurer, a Chief Executive Officer and one or more Vice Presidents (including Executive Vice Presidents or Senior Vice Presidents), Assistant Vice Presidents, Assistant Treasurers and Assistant Secretaries, as the Board of Directors may determine. The Board of Directors may elect from among its members a Chairman of the Board and a Vice Chairman of the Board.

(b) Election. The Presidents, Treasurer and Secretary shall be elected annually by the Board of Directors at their first meeting following the annual meeting of stockholders. Other officers may be chosen by the Board of Directors at such meeting or at any other meeting.

(c) Qualification. No officer need be a stockholder or Director. Any two or more offices may be held by the same person. Any officer may be required by the Board of Directors to give bond for the faithful performance of such officer's duties in such amount and with such sureties as the Board of Directors may determine.

(d) Tenure. Except as otherwise provided by the Certificate of Incorporation or by these By-laws, each of the officers of the Corporation shall hold office until the first meeting of the Board of Directors following the next annual meeting of stockholders and until such officer's successor is elected and qualified or until such officer's earlier resignation or removal. Any officer may resign by delivering his or her written resignation to the Corporation, and such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

(e) Removal. The Board of Directors may remove any officer with or without cause by a vote of a majority of the directors then in office.

(f) Vacancies. Any vacancy in any office may be filled for the unexpired portion of the term by the Board of Directors.

(g) Chairman of the Board and Vice Chairman. Unless otherwise provided by the Board of Directors, the Chairman of the Board of Directors, if one is elected, shall preside, when present, at all meetings of the stockholders and the Board of Directors. The Chairman of the Board shall have such other powers and shall perform such duties as the Board of Directors may from time to time designate.

Unless otherwise provided by the Board of Directors, in the absence of the Chairman of the Board, the Vice Chairman of the Board, if one is elected, shall preside, when present, at all meetings of the stockholders and the Board of Directors. The Vice Chairman of the Board shall have such other powers and shall perform such duties as the Board of Directors may from time to time designate.

(h) Chief Executive Officer. The Chief Executive Officer, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

(i) Presidents. The Presidents shall, subject to the direction of the Board of Directors, each have general supervision and control of the Corporation's business and any action that would typically be taken by a President may be taken by any Co-President. If there is no Chairman of the Board or Vice Chairman of the Board, a President shall preside, when present, at all meetings of stockholders and the Board of Directors. The Presidents shall have such other powers and shall perform such duties as the Board of Directors may from time to time designate.

(j) Vice Presidents and Assistant Vice Presidents. Any Vice President (including any Executive Vice President or Senior Vice President) and any Assistant Vice President shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

(k) Treasurer and Assistant Treasurers. The Treasurer shall, subject to the direction of the Board of Directors, have general charge of the financial affairs of the Corporation and shall cause to be kept accurate books of account. The Treasurer shall have custody of all funds, securities, and valuable documents of the Corporation, except as the Board of Directors may otherwise provide. The Treasurer shall have such other powers and shall perform such duties as the Board of Directors may from time to time designate.

Any Assistant Treasurer shall have such powers and perform such duties as the Board of Directors may from time to time designate.

(l) Secretary and Assistant Secretaries. The Secretary shall record the proceedings of all meetings of the stockholders and the Board of Directors (including committees of the Board) in books kept for that purpose. In the absence of the Secretary from any such meeting an Assistant Secretary, or if such person is absent, a temporary secretary chosen at the meeting, shall record the proceedings thereof. The Secretary shall have charge of the stock ledger (which may, however, be kept by any transfer or other agent of the Corporation) and shall have such other duties and powers as may be designated from time to time by the Board of Directors.

Any Assistant Secretary shall have such powers and perform such duties as the Board of Directors may from time to time designate.

(m) Other Powers and Duties. Subject to these By-laws, each officer of the Corporation shall have in addition to the duties and powers specifically set forth in these By-laws, such duties and powers as are customarily incident to such officer's office, and such duties and powers as may be designated from time to time by the Board of Directors.

4. Capital Stock

(a) Certificates of Stock. Each stockholder shall be entitled to a certificate of the capital stock of the Corporation in such form as may from time to time be prescribed by the Board of Directors. Such certificate shall be signed by a President or a Vice President, and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary. Such signatures may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such 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 time of its issue. Every certificate for shares of stock which are subject to any restriction on transfer and every certificate issued when the Corporation is authorized to issue more than one class or series of stock shall contain such legend with respect thereto as is required by law. The Corporation shall be permitted to issue fractional shares.

(b) Transfers. Subject to any restrictions on transfer, shares of stock may be transferred on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate therefor properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require.

(c) Record Holders. Except as may otherwise be required by law, by the Certificate of Incorporation or by these By-laws, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these By-laws.

It shall be the duty of each stockholder to notify the Corporation of such stockholder's post office address.

(d) Record Date. 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, or to consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or 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, in advance, a record date, which shall not precede the date on which it is established, and which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, more than ten (10) days after the date on which the record date for stockholder consent without a meeting is established, nor more than sixty (60) days prior to any other action. In such case only stockholders of record on such record date shall be so entitled notwithstanding any transfer of stock on the books of the Corporation after the record date.

If no record date is fixed, (i) 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, (ii) 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 necessary, 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 this state, 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, and (iii) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

(e) Lost Certificates. The Corporation may issue a new certificate of stock in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate, or his legal representative, to give the Corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate.

5. Indemnification

(a) Definitions. For purposes of this Section 5:

(i) “Corporate Status” describes the status of a person who is serving or has served (A) as a Director of the Corporation, (B) as an Officer of the Corporation, (C) as a Non-Officer Employee of the Corporation, or (D) as a director, partner, trustee, officer, employee or agent of any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan, foundation, association, organization or other legal entity for which such person is or was serving at the request of the Corporation. For purposes of this Section 5(a)(i), a Director, Officer or Non-Officer Employee of the Corporation who is serving or has served as a director, partner, trustee, officer, employee or agent of a Subsidiary shall be deemed to be serving at the request of the Corporation. Notwithstanding the foregoing, “Corporate Status” shall not include the status of a person who is serving or has served as a director, officer, employee or agent of a constituent corporation absorbed in a merger or consolidation transaction with the Corporation with respect to such person’s activities prior to said transaction, unless specifically authorized by the Board of Directors or the stockholders of the Corporation;

(ii) “Director” means any person who serves or has served the Corporation as a director on the Board of Directors of the Corporation;

(iii) “Disinterested Director” means, with respect to each Proceeding in respect of which indemnification is sought hereunder, a Director of the Corporation who is not and was not a party to such Proceeding;

(iv) “Expenses” means all reasonable attorneys fees, retainers, court costs, transcript costs, fees of expert witnesses, private investigators and professional advisors (including, without limitation, accountants and investment bankers), travel expenses, duplicating costs, printing and binding costs, costs of preparation of demonstrative evidence and other courtroom presentation aids and devices, costs incurred in connection with document review, organization, imaging and computerization, telephone charges, postage, delivery service fees, and all other disbursements, costs or expenses of the type customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settling or otherwise participating in, a Proceeding;

(v) “Liabilities” means judgments, damages, liabilities, losses, penalties, excise taxes, fines and amounts paid in settlement;

(vi) “Non-Officer Employee” means any person who serves or has served as an employee or agent of the Corporation, but who is not or was not a Director or Officer;

(vii) “Officer” means any person who serves or has served the Corporation as an officer of the Corporation appointed by the Board of Directors of the Corporation;

(viii) “Proceeding” means any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, inquiry, investigation, administrative hearing or other proceeding, whether civil, criminal, administrative, arbitrative or investigative; and

(ix) “Subsidiary” shall mean any corporation, partnership, limited liability company, joint venture, trust or other entity of which the Corporation owns (either directly or through or together with another Subsidiary of the Corporation) either (i) a general partner, managing member or other similar interest or (ii) (A) 50% or more of the voting power of the voting capital equity interests of such corporation, partnership, limited liability company, joint venture or other entity, or (B) 50% or more of the outstanding voting capital stock or other voting equity interests of such corporation, partnership, limited liability company, joint venture or other entity.

(b) Indemnification of Directors and Officers. Subject to the operation of Section 5(d) of these By-laws, each Director and Officer shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), and to the extent authorized in subsections (i) through (iv) of this Section 5(b).

(i) Actions, Suits and Proceedings Other than By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses and Liabilities that are incurred or paid by such Director or Officer or on such Director’s or Officer’s behalf in connection with any Proceeding or any claim, issue or matter therein (other than an action by or in the right of the Corporation), which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director’s or Officer’s Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

(ii) Actions, Suits and Proceedings By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses that are incurred by such Director or Officer or on such Director’s or Officer’s behalf in connection with any Proceeding or any claim, issue or matter therein by or in the right of the Corporation, which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director’s or Officer’s Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation; provided, however, that no indemnification shall be

made under this Section 5(b)(ii) in respect of any claim, issue or matter as to which such Director or Officer shall have been finally adjudged by a court of competent jurisdiction to be liable to the Corporation, unless, and only to the extent that, the Court of Chancery or another court in which such Proceeding was brought shall determine upon application that, despite adjudication of liability, but in view of all the circumstances of the case, such Director or Officer is fairly and reasonably entitled to indemnification for such Expenses that such court deems proper.

(iii) Survival of Rights. The rights of indemnification provided by this Section 5(b) shall continue as to a Director or Officer after he or she has ceased to be a Director or Officer and shall inure to the benefit of his or her heirs, executors, administrators and personal representatives.

(iv) Actions by Directors or Officers. Notwithstanding the foregoing, the Corporation shall indemnify any Director or Officer seeking indemnification in connection with a Proceeding initiated by such Director or Officer only if such Proceeding (including any parts of such Proceeding not initiated by such Director or Officer) was authorized in advance by the Board of Directors of the Corporation, unless such Proceeding was brought to enforce such Officer's or Director's rights to indemnification or, in the case of Directors, advancement of Expenses under these By-laws in accordance with the provisions set forth herein.

(c) Indemnification of Non-Officer Employees. Subject to the operation of Section 5(d) of these By-laws, each Non-Officer Employee may, in the discretion of the Board of Directors of the Corporation, be indemnified by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended, against any or all Expenses and Liabilities that are incurred by such Non-Officer Employee or on such Non-Officer Employee's behalf in connection with any threatened, pending or completed Proceeding, or any claim, issue or matter therein, which such Non-Officer Employee is, or is threatened to be made, a party to or participant in by reason of such Non-Officer Employee's Corporate Status, if such Non-Officer Employee acted in good faith and in a manner such Non-Officer Employee reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The rights of indemnification provided by this Section 5(c) shall exist as to a Non-Officer Employee after he or she has ceased to be a Non-Officer Employee and shall inure to the benefit of his or her heirs, personal representatives, executors and administrators. Notwithstanding the foregoing, the Corporation may indemnify any Non-Officer Employee seeking indemnification in connection with a Proceeding initiated by such Non-Officer Employee only if such Proceeding was authorized in advance by the Board of Directors of the Corporation.

(d) Determination. Unless ordered by a court, no indemnification shall be provided pursuant to this Section 5 to a Director, to an Officer or to a Non-Officer Employee unless a determination shall have been made that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal Proceeding, such person had no reasonable cause to believe his or her conduct was unlawful. Such determination shall be made by (i) a majority vote of the Disinterested Directors, even though less than a quorum of the Board of Directors, (ii) a

committee comprised of Disinterested Directors, such committee having been designated by a majority vote of the Disinterested Directors (even though less than a quorum), (iii) if there are no such Disinterested Directors, or if a majority of Disinterested Directors so directs, by independent legal counsel in a written opinion, or (iv) by the stockholders of the Corporation.

(e) Advancement of Expenses to Directors Prior to Final Disposition.

(i) The Corporation shall advance all Expenses incurred by or on behalf of any Director in connection with any Proceeding in which such Director is involved by reason of such Director's Corporate Status within thirty (30) days after the receipt by the Corporation of a written statement from such Director requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Director and shall be preceded or accompanied by an undertaking by or on behalf of such Director to repay any Expenses so advanced if it shall ultimately be determined that such Director is not entitled to be indemnified against such Expenses. Notwithstanding the foregoing, the Corporation shall advance all Expenses incurred by or on behalf of any Director seeking advancement of expenses hereunder in connection with a Proceeding initiated by such Director only if such Proceeding (including any parts of such Proceeding not initiated by such Director) was (A) authorized by the Board of Directors of the Corporation, or (B) brought to enforce such Director's rights to indemnification or advancement of Expenses under these By-laws.

(ii) If a claim for advancement of Expenses hereunder by a Director is not paid in full by the Corporation within thirty (30) days after receipt by the Corporation of documentation of Expenses and the required undertaking, such Director may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and if successful in whole or in part, such Director shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such advancement of Expenses under this Section 5 shall not be a defense to an action brought by a Director for recovery of the unpaid amount of an advancement claim and shall not create a presumption that such advancement is not permissible. The burden of proving that a Director is not entitled to an advancement of expenses shall be on the Corporation.

(iii) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Director has not met any applicable standard for indemnification set forth in the DGCL.

(f) Advancement of Expenses to Officers and Non-Officer Employees Prior to Final Disposition.

(i) The Corporation may, at the discretion of the Board of Directors of the Corporation, advance any or all Expenses incurred by or on behalf of any Officer or any Non-Officer Employee in connection with any Proceeding in which such person is

involved by reason of his or her Corporate Status as an Officer or Non-Officer Employee upon the receipt by the Corporation of a statement or statements from such Officer or Non-Officer Employee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Officer or Non-Officer Employee and shall be preceded or accompanied by an undertaking by or on behalf of such person to repay any Expenses so advanced if it shall ultimately be determined that such Officer or Non-Officer Employee is not entitled to be indemnified against such Expenses.

(ii) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Officer or Non-Officer Employee has not met any applicable standard for indemnification set forth in the DGCL.

(g) Contractual Nature of Rights.

(i) The provisions of this Section 5 shall be deemed to be a contract between the Corporation and each Director and Officer entitled to the benefits hereof at any time while this Section 5 is in effect, in consideration of such person's past or current and any future performance of services for the Corporation. Neither amendment, repeal or modification of any provision of this Section 5 nor the adoption of any provision of the Certificate of Incorporation inconsistent with this Section 5 shall eliminate or reduce any right conferred by this Section 5 in respect of any act or omission occurring, or any cause of action or claim that accrues or arises or any state of facts existing, at the time of or before such amendment, repeal, modification or adoption of an inconsistent provision (even in the case of a proceeding based on such a state of facts that is commenced after such time), and all rights to indemnification and advancement of Expenses granted herein or arising out of any act or omission shall vest at the time of the act or omission in question, regardless of when or if any proceeding with respect to such act or omission is commenced. The rights to indemnification and to advancement of expenses provided by, or granted pursuant to, this Section 5 shall continue notwithstanding that the person has ceased to be a director or officer of the Corporation and shall inure to the benefit of the estate, heirs, executors, administrators, legatees and distributees of such person.

(ii) If a claim for indemnification hereunder by a Director or Officer is not paid in full by the Corporation within sixty (60) days after receipt by the Corporation of a written claim for indemnification, such Director or Officer may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim, and if successful in whole or in part, such Director or Officer shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such indemnification under this Section 5 shall not be a defense to an action brought by a Director or Officer for recovery of the unpaid amount of an indemnification claim and shall not create a presumption that such indemnification is not permissible. The burden of proving that a Director or Officer is not entitled to indemnification shall be on the Corporation.

(iii) In any suit brought by a Director or Officer to enforce a right to indemnification hereunder, it shall be a defense that such Director or Officer has not met any applicable standard for indemnification set forth in the DGCL.

(h) Non-Exclusivity of Rights. The rights to indemnification and advancement of Expenses set forth in this Section 5 shall not be exclusive of any other right which any Director, Officer, or Non-Officer Employee may have or hereafter acquire under any statute, provision of the Certificate or these By-laws, agreement, vote of stockholders or Disinterested Directors or otherwise.

(i) Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any Director, Officer or Non-Officer Employee against any liability of any character asserted against or incurred by the Corporation or any such Director, Officer or Non-Officer Employee, or arising out of any such person's Corporate Status, whether or not the Corporation would have the power to indemnify such person against such liability under the DGCL or the provisions of this Section 5.

(j) Other Indemnification. The Corporation's obligation, if any, to indemnify or provide advancement of Expenses to any person under this Section 5 as a result of such person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount such person may collect as indemnification or advancement of Expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or enterprise (the "Primary Indemnitor"). Any indemnification or advancement of Expenses under this Section 5 owed by the Corporation as a result of a person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall only be in excess of, and shall be secondary to, the indemnification or advancement of Expenses available from the applicable Primary Indemnitor(s) and any applicable insurance policies.

6. Miscellaneous Provisions

(a) Fiscal Year. Except as otherwise determined by the Board of Directors, the fiscal year of the Corporation shall end on December 31 of each year.

(b) Seal. The Board of Directors shall have power to adopt and alter the seal of the Corporation.

(c) Execution of Instruments. Subject to any limitations which may be set forth in a resolution of the Board of Directors, all deeds, leases, transfers, contracts, bonds, notes and other obligations to be entered into by the Corporation in the ordinary course of its business without director action may be executed on behalf of the Corporation by, a President, or by any other officer, employee or agent of the Corporation as the Board of Directors may authorize.

(d) Voting of Securities. Unless the Board of Directors otherwise provides, a President, any Vice President or the Treasurer may waive notice of and act on behalf of this Corporation, or appoint another person or persons to act as proxy or attorney in fact for this

Corporation with or without discretionary power and/or power of substitution, at any meeting of stockholders or shareholders of any other corporation or organization, any of whose securities are held by this Corporation.

(e) Resident Agent. The Board of Directors may appoint a resident agent upon whom legal process may be served in any action or proceeding against the Corporation.

(f) Corporate Records. The original or attested copies of the Certificate of Incorporation, By-laws and records of all meetings of the incorporators, stockholders and the Board of Directors and the stock and transfer records, which shall contain the names of all stockholders, their record addresses and the amount of stock held by each, shall be kept at the principal office of the Corporation, at the office of its counsel, or at an office of its transfer agent.

(g) Certificate of Incorporation. All references in these By-laws to the Certificate of Incorporation shall be deemed to refer to the Certificate of Incorporation of the Corporation, as amended and in effect from time to time.

(h) Amendments. These By-laws may be altered, amended or repealed, and new By-laws may be adopted, by the stockholders or by the Board of Directors; provided, that (a) the Board of Directors may not alter, amend or repeal any provision of these By-laws which by law, by the Certificate of Incorporation or by these By-laws requires action by the stockholders and (b) any alteration, amendment or repeal of these By-laws by the Board of Directors and any new By-law adopted by the Board of Directors may be altered, amended or repealed by the stockholders.

(i) Waiver of Notice. Whenever notice is required to be given under any provision of these By-laws, 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 of the event for which notice is to be given, 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 meeting needs to be specified in any written waiver or any waiver by electronic transmission.

Adopted July 29, 2014

Exhibit 4.2

INVESTORS' RIGHTS AGREEMENT

THIS INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of the 20th day of August, 2015, by and among INTELLIA THERAPEUTICS, INC., a Delaware corporation (the "**Company**"), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**".

RECITALS

WHEREAS, the Company and certain of the Investors are parties to the Series B Preferred Stock Purchase Agreement of even date herewith (the "**Purchase Agreement**"); and

WHEREAS, in order to induce the Company to enter into the Purchase Agreement and to induce the Investors to invest funds in the Company pursuant to the Purchase Agreement, the Investors and the Company hereby agree that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors, to receive certain information from the Company, and to participate in future equity offerings by the Company, and shall govern certain other matters as set forth in this Agreement.

NOW, THEREFORE, the parties hereby 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, managing member, 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 shares the same management company with, such Person.

1.2 "**Common Stock**" means shares of the Company's common stock, $0.0001 par value per share.

1.3 "**Competitor**" means a Person, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), that undertakes research and development relating to any and all therapeutic, prophylactic and palliative uses and applications for any or all diseases and conditions in humans using CRISPR technology, but shall not include 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 Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the Board of Directors of any Competitor. The Company and each of the Investors acknowledges that (i) none of the Investors shall be deemed to be a Competitor by virtue of its (or any of its Affiliates') status as an Investor in, or collaboration or licensing partner with, the Company and (ii) the Novartis Group shall not be deemed to be a Competitor. For the purpose of this Agreement, the term "**Novartis Group**" means Novartis Institutes for BioMedical Research, Inc. and entities directly or indirectly 100% owned by Novartis AG, together with the Genomics Institute of the Novartis Research Foundation and the Friedrich Miescher Institute for Biomedical Research.

1.4 "**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.

1.5 "**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.

1.6 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.7 "**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.

1.8 "**FOIA Party**" means a Person that, in the reasonable determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 ("**FOIA**"), any state public records access law, any state or other jurisdiction's laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.9 "**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.

1.10 "**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.

1.11 "**Founder Stock**" means shares of the Company's Founder Stock, $0.0001 par value per share.

1.12 "**GAAP**" means generally accepted accounting principles in the United States.

1.13 "**Holder**" means any holder of Registrable Securities who is a party to this Agreement.

1.14 "**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, including, adoptive relationships, of a natural person referred to herein.

1.15 "**Initiating Holders**" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.16 "**IPO**" means the Company's first underwritten public offering of its Common Stock under the Securities Act.

1.17 "**Key Employee**" means any executive-level employee (including, division director and vice president-level positions), as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.18 "**Major Investor**" means any Investor that, individually or together with such Investor's Affiliates, holds at least 95,238 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof), provided, however, for the purposes of this definition, shares of Registrable Securities held by the Fidelity Entities shall be aggregated together for the purpose of determining whether any such entity is a Major Investor.

1.19 "**Major Purchaser Majority**" shall mean stockholders then holding shares of Preferred Stock representing at least sixty-seven percent (67%) of the combined voting power of the Preferred Stock (calculated on an as-converted to Common Stock basis).

1.20 "**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.

1.21 "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.22 **"Preferred Directors**" means collectively, the directors of the Company that the holders of record of the Series B Preferred Stock, the Series A-2 Preferred Stock and the Series A-1 Preferred Stock are entitled to elect pursuant to the Restated Certificate.

1.23 "**Preferred Stock**" means, collectively, shares of the Company's Series B Preferred Stock, $0.0001 par value per share (the "**Series B Preferred Stock**"), Series A-2 Preferred Stock, $0.0001 par value per share (the "**Series A-2 Preferred Stock**"), Series A-1 Preferred Stock, $0.0001 par value per share (the "**Series A-1 Preferred Stock**"), and Junior Preferred Stock, $0.0001 par value per share (the "**Junior Preferred Stock**"). Preferred Stock excludes Founder Stock.

1.24 "**Registrable Securities**" means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; and (ii) 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 clause (i) 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 Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.25 "**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.

1.26 "**Restated Certificate**" means the Company's Amended and Restated Certificate of Incorporation, as such may be further amended or restated from time to time.

1.27 "**Restricted Securities**" means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b) hereof.

1.28 "**SEC**" means the Securities and Exchange Commission.

1.29 "**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

1.30 "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

1.31 "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.32 "**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 Subsection 2.6.

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) three (3) years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least $10 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 sixty (60) 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 Subsections 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 Holders of at least twenty percent (20%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least $4 million, 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 forty-five (45) 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 Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors 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 twice in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such one hundred twenty (120) day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 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 Subsection 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 Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 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 Subsection 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 Subsection 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 Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 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 Subsection 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 Subsection 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 Subsection 2.6.

2.3 Underwriting Requirements

(a) If, pursuant to Subsection 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 Subsection 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 in interest 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 Subsection 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 Subsection 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 Subsection 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 twenty-five percent (25%) 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 Subsection 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 sixty (60) 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 managing 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 $40,000 per registration in the case of an IPO or $20,000 in the case of a "follow-on" offering subsequent to an IPO, 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 Subsection 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 Subsections 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 Subsections 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 Subsection 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 Subsection 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 Subsections 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 Subsection 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 Subsection 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.

(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 Subsection 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 Subsection 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 Subsection 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 Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 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 Subsection 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) and (ii) 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 (i) before the IPO, the Major Purchaser Majority, and (ii) after the IPO, the Holders of sixty-seven percent (67%) 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 Subsection 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 or Form S-3, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days in the case of the IPO, or such other period as may be requested by the Company or an underwriter 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 (whether such shares or any such securities are then owned by the Holder or are thereafter acquired) 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.

(b) The foregoing provisions of Subsection 2.11(a) shall apply only to the IPO, shall not apply to (i) the sale of any shares to an underwriter pursuant to an underwriting agreement, or (ii) 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 and 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 and Founder Stock) are subject to restrictions no less restrictive than those set forth in this Section 2.11. Notwithstanding the foregoing, Subsection 2.11(a) shall not apply to shares of Common Stock (i) acquired in the IPO, or (ii) acquired in open market transactions after the IPO.

(c) The underwriters in connection with such registration are intended third-party beneficiaries of this Subsection 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 Subsection 2.11 or that are necessary to give further effect thereto.

(d) Any discretionary waiver or termination of the restrictions of any or all of 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, except that, notwithstanding the foregoing, the Company and the underwriters may, in their sole discretion, waive or terminate these restrictions with respect to up to that number of shares of Common Stock, in the aggregate for all individuals, representing no more than 1% of the sum of (i) the shares subject to this Subsection 2.11 and (ii) the shares subject to all other lock-up

provisions and agreements, provided, however, that if any shares are subject to multiple lock-up provisions or agreements referenced herein, such shares shall only be counted once for the purposes of determining the aggregate number and percentage of shares subject to a lock-up provision or agreement as provided for in this Subsection 2.11(d).

(e) Notwithstanding the foregoing, in the event that the Company and/or the underwriters in connection with the IPO agree to allow any securityholder to hold its shares of Company capital stock subject to lock-up restrictions which are more favorable to such securityholder than the lock-up restrictions applicable to the Registrable Securities purchased by a Major Investor, the lock-up restrictions applicable to such Registrable Securities held by each Major Investor will be automatically amended to conform to the more favorable lock-up restrictions applicable to the shares held by such securityholder.

(f) The Company shall be obligated to reissue promptly unlegended certificates at the request of any Holder thereof if the Company has completed its IPO or in connection with a sale of Registrable Securities by a Holder pursuant to Rule 144 and the Holder shall have obtained an opinion of counsel (which counsel may be counsel to the Company) reasonably acceptable to the Company (it being understood that internal securities counsel of Fidelity shall be deemed acceptable for transfers by any Fidelity Entity) to the effect that the securities proposed to be disposed of may lawfully be so disposed of without registration, qualification and legend.

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.

(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 Subsection 2.12(c)) be notated 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 Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership 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 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 transfers Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate instrument, or book entry shall not be notated with 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 Subsections 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 Restated Certificate;

(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

(c) the fourth (4th) anniversary of the IPO.

3. Information and Observer Rights

3.1 Delivery of Financial Statements. The Company shall deliver to each Investor:

(a) as soon as practicable, but in any event within one hundred twenty (120) days after the end of each fiscal year of the Company, (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, (iii) a comparison between (x) the actual amounts shown on such balance sheet and statements of income and of cash flows as of and for such fiscal year and (y) the comparable amounts for the prior year and as included in the Budget (as defined in Subsection 3.1(e)) for such year, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such year, and (iv) a statement of stockholders' equity as of the end of such year, all such financial statements prepared in accordance with GAAP and audited and certified by an independent public accounting firm of nationally recognized standing selected by the Board of Directors;

(b) as soon as practicable, but in any event within sixty (60) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, and, if requested by the Board of Directors in its sole discretion, a comparison between (x) the actual amounts as of and for such quarter and (y) the comparable amounts for the prior quarter and the comparable time period one (1) year prior and as included in the Budget for such quarter, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within sixty (60) days after the end of each of the first three (3) quarters of each fiscal year of the Company, a statement showing the 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 certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(d) as soon as practicable, but in any event within thirty (30) days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the "**Budget**"), approved by the Board of Directors (including the Preferred Directors) and prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company;

(e) as soon as practicable, but in any event within thirty (30) days of the end of each month, an unaudited income statement and statement of cash flows for such month, and an unaudited balance sheet as of the end of such month, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(f) with respect to the financial statements called for in Subsection 3.1(a), Subsection 3.1(b) and, if applicable, Subsection 3.1(e), an instrument executed by the chief financial officer and chief executive officer of the Company certifying that such financial statements were prepared in accordance with GAAP consistently applied with prior practice for earlier periods (except as otherwise set forth in Subsection 3.1(b) and Subsection 3.1(e)) and fairly present the financial condition of the Company and its results of operation for the periods specified therein; and

(g) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1(g) to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

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 Subsection 3.1 to the contrary, other than with respect to the Company's obligation to provide the information set forth in Subsections 3.1(a), 3.1(b) and 3.1(f) to any Fidelity Entity, which obligation shall not be affected by the foregoing exception, the Company may cease providing the information set forth in this Subsection 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 Subsection 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 Major Investor (which for purposes of this Subsection 3.2 shall include any Affiliate or limited partner of any Major Investor, provided that the Board of Directors has not reasonably determined that such Major Investor, Affiliate, or limited partner is a Competitor of the Company), at such Major 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, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith, after consultation with counsel, considers to be a trade secret or confidential information of the Company (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel. Any information made available to or learned by Caribou Therapeutics Holdco, LLC ("**Caribou**") shall be subject to the third-to-last sentence of Section 3.5.

3.3 Observer Rights. For so long as OrbiMed Private Investments V, L.P. ("**OrbiMed**") is a Major Investor, the Company shall invite a representative of OrbiMed to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if 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 disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a competitor of the Company. For so long as Novartis Institutes for BioMedical Research, Inc. or its Affiliates ("**Novartis**") is a Major Investor, the Company shall invite a representative of Novartis to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if 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 disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a competitor of the Company. For the purposes of this Subsection 3.3, Novartis shall not be deemed a competitor of the Company. For so long as 667, L.P. and Baker Brothers Life Sciences, L.P. (collectively, "**Baker Bros**") own at least 75% of the aggregate Series B Preferred Stock Baker Bros purchased pursuant to the Purchase Agreement, the Company shall invite a representative of Baker Bros to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if 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 disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a competitor of the Company.

3.4 Termination of Information and Observer Rights. The covenants set forth in Subsection 3.1, Subsection 3.2 and Subsection 3.3 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate, in which the consideration received by the Investors is in the form of cash and/or freely-tradeable marketable securities, 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, including without limitation consideration of any potential follow-on investment) 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 Subsection 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, (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 or (d) is permitted to be used by such Investor pursuant to a license or other written agreement between the Company and such Investor or an Affiliate of such Investor; 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 Subsection 3.5; (iii) to any Affiliate, Affiliated Fund, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information and any such Affiliated Fund shall agree to be bound to the provisions of this Subsection 3.5 and such Investor shall be responsible for such compliance; (iv) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure or (v) in the case of any Investor that is a registered investment company within the meaning of the Investment Company Act of 1940, as amended, consistent with its required investment reporting practices. Notwithstanding anything to the contrary in the foregoing, Caribou shall not, and shall ensure that Caribou Biosciences, Inc. does not, disclose hereunder any confidential information of the Company to any Beneficial Owner of Caribou or Caribou Biosciences, Inc. without prior written consent of the Company, provided that the foregoing shall not prohibit Caribou or Caribou Biosciences, Inc. from disclosing confidential information to its members or stockholders, as the case may be, solely to the extent reasonably necessary for such members or stockholders to monitor their indirect economic interests in the Company. Notwithstanding anything to the contrary in the foregoing, Novartis Institutes for BioMedical Research, Inc. ("**Novartis**") shall not disclose any confidential information of the Company to any third party without prior written consent of the Company, provided that the foregoing shall not prohibit Novartis or its parent Affiliates from disclosing the fact of Novartis's investment in the Company and providing such other information about the Company to its parent Affiliates as is necessary to monitor Novartis's investment in the Company in the ordinary course of its business (provided that such information shall not include technical or proprietary information of

the Company). As used herein, "Beneficial Owner" shall mean a person or entity that is a beneficial owner of such entity's securities, membership interests or partnership interests as determined in accordance with Rule 16a-1(a)(2) promulgated under the Exchange Act.

4. Rights to Future Stock Issuances

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 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, provided that in the case of an apportionment of rights under this Subsection 4.1 by a holder of Junior Preferred Stock, such Affiliate is a Beneficial Owner of Caribou Biosciences, Inc., 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 or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agreement and each of the Voting Agreement and Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an "**Investor**" under each such agreement (provided that any Competitor and any FOIA Party shall not be entitled to any rights as an Investor under Subsections 3.1, 3.2 and 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 twenty (20) 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 the 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, but not including any shares of Common Stock then held by such Investor that were acquired other than upon the exercise or conversion of Derivative Securities) bears to the total number of shares of Common Stock of the Company then held by Investors (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other outstanding Derivative Securities). At the expiration of such twenty (20) 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 Subsection 4.1(b) shall occur within the later of one hundred twenty (120) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 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 Subsection 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Subsection 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 thirty (30) 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 Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Restated Certificate); or (ii) shares of Common Stock issued in the IPO.

(e) The rights of the Investors to purchase New Securities under this Subsection 4.1 may be modified or waived by a Major Purchaser Majority; provided, however, that in the event the rights to purchase New Securities under this Subsection 4.1 are waived and any Investor(s) purchase New Securities, the Company will give notice to the other 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 such other Investor shall have twenty (20) days from the date notice is given to elect to purchase on similar terms and conditions in a subsequent closing 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 Subsection 4.1(b) before giving effect to the issuance of such New Securities.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate, in which the consideration received by the Investors is in the form of cash and/or freely-tradeable marketable securities, whichever event occurs first.

5. Additional Covenants

5.1 Insurance. The Company currently maintains Directors and Officers liability insurance in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policy to be maintained until such time as the Board of Directors (including a majority of the Preferred Directors) determines that such insurance should be discontinued.

5.2 Employee Agreements. The Company will cause (i) each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement; and (ii) each Key Employee to enter into a six (6) month noncompetition and nonsolicitation agreement, substantially in the form approved by the Board of Directors. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the consent of the Preferred Directors.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including the Preferred Directors, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in Subsection 2.11. In addition, unless otherwise approved by the Board of Directors, including the Preferred Directors, the Company shall retain a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Matters Requiring Investor Director Approval. So long as the holders of Preferred Stock are entitled to elect the Preferred Directors, the Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors, which approval must include the affirmative vote of the Preferred Directors:

(a) make, or permit any subsidiary to make, any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company;

(b) make, or permit any subsidiary to make, any loan or advance to any Person, including, without limitation, any employee or director of the Company or any subsidiary, except advances and similar expenditures in the ordinary course of business or under the terms of an employee stock or option plan approved by the Board of Directors;

(c) otherwise enter into or be a party to any transaction with any director, officer, or employee of the Company or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, except for transactions contemplated by this Agreement; or transactions made in the ordinary course of business and pursuant to reasonable requirements of the Company's business and upon fair and reasonable terms that are approved by a majority of the Board of Directors;

(d) hire, terminate, or change the compensation of the chief executive officer, including approving any option grants or stock awards to the chief executive officer;

(e) enter into any transaction with an affiliate of the Company on terms less favorable to the Company than those available to the Company on an arms-length basis with an independent third party; and

(f) sell, assign, license, pledge or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business.

5.5 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the nonemployee 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 of Directors. The Company may cause to be established an audit and compensation committee, each of which shall consist solely of non-management directors. Each Preferred Director shall be entitled in such person's discretion to be a member of any Board committee.

5.6 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, the Restated Certificate, or elsewhere, as the case may be.

5.7 Information Requests. The Company shall promptly and accurately respond, and shall use its reasonable best efforts to cause its transfer agent to promptly respond, to requests for information made on behalf of any Fidelity account relating to (a) accounting or securities law matters required in connection with its audit or (b) the actual holdings of the Fidelity accounts, including in relation to the total outstanding shares; provided, however, that the Company shall not be obligated to provide or cause its transfer agent to provide any such information that could reasonably result in a violation of applicable law or its disclosure of (including by confirming the absence of) material non-public information or conflict with the Company's insider trading policy or confidentiality obligation of the Company.

5.8 Termination of Covenants. The covenants set forth in this Section 5, except Subsection 5.6, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate, in which the consideration received by the Investors is in the form of cash and/or freely-tradeable marketable securities, whichever event occurs first.

5.9 Acknowledgement. Subject in all respects to Subsection 3.5, the Company hereby acknowledges that Fidelity and the Fidelity Entities are professional investment managers and/or funds, and as such, invest in numerous portfolio companies, some of which may be deemed competitive with the Company's business (as conducted or proposed to be conducted). Neither the Fidelity Entities nor their respective affiliates (including affiliated advisors and

funds) shall be liable to the Company for any claim arising out of, or based upon, (a) the investment by the Fidelity Entities or any affiliated fund in any entity competitive to the Company, or (b) actions taken by any advisor, partner, officer or other representative of a Fidelity Entity or any affiliated fund to assist any such competitive company, whether or not such action was taken as a board member of such competitive company, or otherwise.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) (a) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate or Affiliated Fund 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 50,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations), or (b) by Fidelity or its Affiliated Funds (each, a "**Fidelity Entity**") (1) to any other entity managed by a registered investment advisor or (2) pursuant to a merger or reorganization of a third-party U.S. registered mutual fund with Fidelity or its Affiliated Funds; 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 Subsection 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. The term "**Affiliated Fund**" means with respect to a (A) limited liability company or a limited liability partnership, a fund or entity managed by the same manager or general partner or management company and (B) an investment company registered under the Investment Company Act of 1940, as amended, advised by Fidelity Management & Research Company ("**Fidelity**") or any affiliated investment advisor of Fidelity, one or more mutual fund, pension fund, pooled investment vehicle or institutional client advised by Fidelity or any affiliated investment advisor of Fidelity, in each case, registered under the Investment Advisers Act of 1940.

6.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, without regard to any conflicts of laws principles that would require the application of laws of any other jurisdiction.

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, *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**.**

6.4 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 the principal office of the Company, Intellia Therapeutics, Inc., 130 Brookline St., Suite 201, Cambridge, MA 02139, and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5. If notice is given to the Company, a copy (which shall not constitute notice) shall also be sent to Goodwin Procter LLP, Exchange Place, Boston, MA 02109, Attn: Arthur R. McGivern, Esq. If notice is given to the Investors, a copy shall also be given to such person or entity listed under the Investor's name on Schedule A and to Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, MA 02109, Attn: Stuart Falber, Esq.

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 (i) before the IPO, the Major Purchaser Majority, and (ii) after the IPO, the Holders of sixty-seven percent (67%) of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 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; 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; and provided further that the provisions of Subsections 2.11, 3.1, 3.2, 3.4, 5.7, 5.8, 5.9, 6.1 and 6.14 and the definition of "Major Investor" may only be amended or waived (either generally or in a particular instance and either retroactively or prospectively) with the written consent of Fidelity if any such amendment or waiver would adversely affect the rights of Fidelity as an Investor. Notwithstanding the foregoing, 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, subject to the Company's compliance with the terms of Subsection 4.1(e), 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). 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 Subsection 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 and/or Affiliated Funds shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons and/or Affiliated Funds 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 Company's Preferred Stock after the date hereof, whether pursuant to the Purchase Agreement or otherwise, any purchaser of such shares of 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.

6.11 Dispute Resolution. Any unresolved controversy or claim arising out of or relating to this Agreement, except as (i) otherwise provided in this Agreement, or (ii) any such controversies or claims arising out of either party's intellectual property rights for which a provisional remedy or equitable relief is sought, shall be submitted to arbitration by one arbitrator mutually agreed upon by the parties, and if no agreement can be reached within thirty (30) days after names of potential arbitrators have been proposed by the American Arbitration Association (the "AAA"), then by one arbitrator having reasonable experience in corporate finance transactions of the type provided for in this Agreement and who is chosen by the AAA. The arbitration shall take place in Boston, Massachusetts, in accordance with the AAA rules then in effect, and judgment upon any award rendered in such arbitration will be binding and may be

entered in any court having jurisdiction thereof. There shall be limited discovery prior to the arbitration hearing as follows: (a) exchange of witness lists and copies of documentary evidence and documents relating to or arising out of the issues to be arbitrated, (b) depositions of all party witnesses and (c) such other depositions as may be allowed by the arbitrators upon a showing of good cause. Depositions shall be conducted in accordance with the Massachusetts Code of Civil Procedure, the arbitrator shall be required to provide in writing to the parties the basis for the award or order of such arbitrator, and a court reporter shall record all hearings, with such record constituting the official transcript of such proceedings.

The prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled. Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in the U.S. District Court located in Boston, Massachusetts or any court of the Commonwealth of Massachusetts having subject matter jurisdiction.

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 Acknowledgment. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict the Investors from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

6.14 Massachusetts Business Trust. A copy of the Agreement and Declaration of Trust of each Investor affiliated with Fidelity, or any affiliate thereof, 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 trustees of such Investor or any affiliate thereof as trustees and not individually and that the obligations of this Agreement are not binding on any of the trustees, officers or stockholders of such Investor or any affiliate thereof individually but are binding only upon such Investor or any affiliate thereof and its assets and property.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Investors' Rights Agreement as of the date first written above.

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessan Bermingham

Name: Nessan Bermingham

Title: President and Chief Executive Officer

INVESTORS:

ATLAS VENTURE FUND IX, L.P.

By: Atlas Venture Associates IX, L.P.
Its General Partner
By: Atlas Venture Associates IX, LLC
Its General Partner

By: /s/ Frank Castellucci

Name: Frank Castellucci

Title: General Counsel

INVESTORS:

NOVARTIS INSTITUTES FOR
BIOMEDICAL RESEARCH, INC.

By: /s/ Scott Brown

Name: Scott Brown

Title: V. P. and General Counsel, NIBR

INVESTORS:

CARIBOU THERAPEUTICS HOLDCO, LLC

By: Caribou Biosciences, Inc.
Its Manager

By: /s/ Rachel Haurwitz

Name: Rachel Haurwitz

Title: President and Chief Executive Officer

INVESTORS:

ORBIMED PRIVATE INVESTMENTS V, L.P.

By: OrbiMed Capital GP V LLC,
its General Partner

By: OrbiMed Advisors LLC,
its Managing Member

By: /s/ Carl Gordon
Name: Carl L. Gordon
Its: Member

ORBIMED GLOBAL HEALTHCARE MASTER FUND, L.P.

By: OrbiMed Global Healthcare GP LLC,
its General Partner

By: OrbiMed Advisors LLC,
its Managing Member

By: /s/ Carl Gordon
Name: Carl L. Gordon
Title: Member

INVESTORS:

FIDELITY SELECT PORTFOLIOS:
BIOTECHNOLOGY PORTFOLIO

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

FIDELITY ADVISOR SERIES VII:
FIDELITY ADVISOR BIOTECHNOLOGY FUND

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTORS:

PYRAMIS LIFECYCLE BLUE CHIP GROWTH COMMINGLED POOL

By: Pyramis Global Advisors Trust Company, as Trustee

By: /s/ Dooglas Rayne
Name: Dooglas Rayne
Title: VP Treasury

FIDELITY SECURITIES FUND: FIDELITY BLUE CHIP GROWTH FUND

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTORS:

FIDELITY BLUE CHIP GROWTH COMMINGLED POOL

By: Fidelity Management & Trust Co.

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

FIDELITY SECURITIES FUND: FIDELITY SERIES BLUE CHIP GROWTH FUND

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTORS:

FIDELITY MT. VERNON STREET TRUST:
FIDELITY SERIES GROWTH COMPANY FUND

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

FIDELITY MT. VERNON STREET TRUST:
FIDELITY GROWTH COMPANY FUND

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTORS:

FIDELITY GROWTH COMPANY
COMMINGLED POOL

By: Fidelity Management & Trust Co.

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

FIDELITY SECURITIES FUND: FIDELITY
OTC PORTFOLIO

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTORS:

FIDELITY OTC COMMINGLED POOL

By: Fidelity Management & Trust Co.

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTORS:

667, L.P.

BY: BAKER BROS. ADVISORS LP, management company and investment adviser to **667, L.P.**, pursuant to authority granted to it by Baker Biotech Capital, L.P., general partner to 667, L.P., and not as the general partner.

By: /s/ Scott Lessing
Name: Scott Lessing
Title: President

BAKER BROTHERS LIFE SCIENCES, L.P.

By: BAKER BROS. ADVISORS LP, , management company and investment adviser to **Baker Brothers Life Sciences, L.P**., pursuant to authority granted to it by Baker Brothers Life Sciences Capital, L.P., general partner to Baker Brothers Life Sciences, L.P., and not as the general partner.

By: /s/ Scott Lessing
Name: Scott Lessing
Title: President

INVESTORS:

BLACKROCK HEALTH SCIENCES TRUST

By: BlackRock Advisors, LLC
Its: Investment Adviser

By: /s/ Thomas P. Callan
Name: Thomas P. Callan
Title: Managing Director

BLACKROCK HEALTH SCIENCES OPPORTUNITIES PORTFOLIO, A SERIES OF BLACKROCK FUNDS

By: BlackRock Advisors, LLC
Its: Investment Adviser

By: /s/ Thomas P. Callan
Name: Thomas P. Callan
Title: Managing Director

BLACKROCK HEALTH SCIENCES MASTER UNIT TRUST

By: BlackRock Capital Management, Inc.
Its: Investment Adviser

By: /s/ Thomas P. Callan
Name: Thomas P. Callan
Title: Managing Director

INVESTORS:

FORESITE CAPITAL FUND III, L.P.

By: Foresite Capital Management III, LLC
Its: General Partner

By: /s/ Dennis D. Ryan
Name: Dennis D. Ryan
Title: Chief Financial Officer

INVESTORS:

TLS BETA PTE. LTD.

By: /s/ Fidah Alsagoff
Name: Fidah Alsagoff
Title: Authorised Signatory

INVESTORS:

JANUS CAPITAL FUNDS PLC - JANUS GLOBAL LIFE SCIENCES FUND

By: /s/ Andy Acker
Name: Andy Acker
Title: Portfolio Manager

INVESTORS:

NEW EMERGING MEDICAL
OPPORTUNITIES FUND II LP

By: /s/ Michael Sjostrom
Name: Michael Sjostrom, CFA
Title: CIO of Sectoral Asset Management Inc.
(Investment Manager of the New Emerging Medical Opportunities Fund II LP)

INVESTORS:

ECOR1 CAPITAL FUND, L.P.
By: its General Partner

ECOR1 CAPITAL, LLC

By: /s/ Oleg Nodelman
Name: Oleg Nodelman
Title: Managing Director, EcoR1 Capital, LLC

ECOR1 CAPITAL FUND QUALIFIED, L.P.
By: its General Partner

ECOR1 CAPITAL, LLC

By: /s/ Oleg Nodelman
Name: Oleg Nodelman
Title: Managing Director, EcoR1 Capital, LLC

INVESTORS:

LEERINK SWANN CO-INVESTMENT FUND, LLC

By: /s/ Joseph R. Gentile
Name: Joseph R. Gentile
Title: Manager

LEERINK HOLDINGS LLC

By: /s/ Timothy A.G. Gerhold
Name: Timothy A.G. Gerhold
Title: General Counsel

SCHEDULE A

Investors

Name and Address

ATLAS VENTURE FUND IX, L.P.

NOVARTIS INSTITUTES FOR
BIOMEDICAL RESEARCH, INC.

CARIBOU THERAPEUTICS HOLDCO,
LLC

ORBIMED PRIVATE INVESTMENTS V,
L.P.

ORBIMED GLOBAL HEALTHCARE
MASTER FUND, L.P.

FIDELITY SELECT PORTFOLIOS:
BIOTECHNOLOGY PORTFOLIO

FIDELITY ADVISOR SERIES VII:
FIDELITY ADVISOR BIOTECHNOLOGY
FUND

PYRAMIS LIFECYCLE BLUE CHIP
GROWTH COMMINGLED POOL

FIDELITY SECURITIES FUND:
FIDELITY BLUE CHIP GROWTH FUND

FIDELITY BLUE CHIP GROWTH COMMINGLED POOL

FIDELITY SECURITIES FUND: FIDELITY SERIES BLUE CHIP GROWTH FUND

FIDELITY MT. VERNON STREET TRUST: FIDELITY SERIES GROWTH COMPANY FUND

FIDELITY MT. VERNON STREET TRUST: FIDELITY GROWTH COMPANY FUND

FIDELITY GROWTH COMPANY
COMMINGLED POOL

FIDELITY SECURITIES FUND:
FIDELITY OTC PORTFOLIO

FIDELITY OTC COMMINGLED POOL

667, L.P.

BAKER BROTHERS LIFE SCIENCES, L.P.

BLACKROCK HEALTH SCIENCES TRUST

BLACKROCK HEALTH SCIENCES OPPORTUNITIES PORTFOLIO, A SERIES OF BLACKROCK FUNDS

BLACKROCK HEALTH SCIENCES
MASTER UNIT TRUST

FORESITE CAPITAL FUND III, L.P.

TLS BETA PTE. LTD.

JANUS CAPITAL FUNDS PLC - JANUS
GLOBAL LIFE SCIENCES FUND

NEW EMERGING MEDICAL OPPORTUNITIES FUND II LP

ECOR1 CAPITAL FUND, L.P.

ECOR1 CAPITAL FUND QUALIFIED, L.P.

LEERINK SWANN CO-INVESTMENT FUND, LLC

LEERINK HOLDINGS LLC

Exhibit 10.3

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

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 [***]; 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 [***].

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 [***].

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 [***].

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 [***].

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 [***].

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 [***] 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 [***].

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.

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

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.

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

[***]

(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 [***] ("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*]

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

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

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Exhibit A

Caribou Pre-Existing In-Licenses

[***]

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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 [***]	[***]

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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 [***]	[***]
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	

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Title	Application No.	Filing date	Assignee	Applicable License Agreement if not owned by Company
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	

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Exhibit C

[***]

[***]

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Exhibit D

In-License Addendum

See Exhibit C

[***]

Exhibit 10.4

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Execution Copy

SERVICES AGREEMENT

This Services Agreement (the "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, Intellia and Caribou desire for Caribou to perform certain research and development services on behalf of Intellia.

WHEREAS, the Parties have entered into that certain License Agreement, of even date herewith (the "License Agreement").

WHEREAS, the Parties desire to have patents and know-how resulting from the services provided by Caribou hereunder included within the Caribou IP that is licensed to Intellia pursuant to the License Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual promises set forth in this Agreement, and other good and valuable consideration, the exchange, receipt and sufficiency of which are acknowledged, the Parties agree as follows:

1. Services.

1.1 Research Plan. Caribou and Intellia will negotiate in good faith and agree to a joint research plan setting forth the research and development services to be performed by Caribou hereunder (the "Services") and associated budget within [***] of the Effective Date (the "Research Plan"). The Research Plan shall be in writing and be jointly approved by Intellia and Caribou. The Research Plan shall cover activities to be performed during [***] period commencing [***] following the execution of the Research Plan by both Parties [***]

1.2 Performance. Caribou agrees to use commercially reasonable efforts to perform the Services, including by delivering any deliverables, in accordance with the Research Plan, this Agreement and all applicable laws, rules, regulations and industry standards. [***].

1.3 Subcontractors. Caribou shall have the right to subcontract any of the Services without the prior written consent of Intellia; provided that Caribou shall remain responsible for the performance of such subcontractors in fulfilling its obligations under this Agreement and that any such subcontractor shall be under confidentiality and intellectual property assignment provisions no less stringent than those set forth herein and in the License Agreement. Caribou has and shall maintain with all Caribou employees, agents and consultants, written agreements sufficient to enable Caribou to perform its obligations hereunder [***]. To the fullest extent permissible, Caribou agrees to pass through to Intellia any and all warranties provided by third-party providers of products or services to which access is provided hereunder, and, if applicable, by subcontractors engaged to provide any portion of the Services.

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2. Fees and Expenses. In consideration for the Services provided hereunder, Intellia shall pay Caribou [***], payable [***] in advance, with the first payment due on [***].

3. Joint Steering Committee.

3.1 Membership. The Parties shall, as soon as practicable and, in any event, no later than [***] days after the Effective Date, form a joint steering committee (the "Joint Steering Committee" or "JSC"). The Joint Steering Committee shall consist of (a) [***] to be selected by mutual agreement of Caribou and Intellia, (b) [***] representatives of Caribou and (c) [***] representatives of Intellia; provided that the Parties may agree in writing to a different [***] number of representatives. Unless the Parties agree differently in writing, the JSC shall be chaired by [***] (the "Committee Chair"). At least [***] representative from each Party shall have the authority to make decisions on behalf of and bind such Party within the scope of the authority of the JSC. Subject to the foregoing, each Party may replace its representatives to the Joint Steering Committee at any time upon written notice to the other Party and the Committee Chair may be replaced only upon the mutual written agreement of both Parties.

3.2 Responsibilities of Committee Chair. The Committee Chair shall have the following responsibilities:

(a) to notify each Party at least [***] in advance of each meeting of the JSC;

(b) to collect and organize agenda items for each meeting of the JSC; and

(c) to prepare the written minutes of each meeting of the JSC and circulate such minutes for review and approval by the Parties.

3.3 Responsibilities and Authority of Joint Steering Committee. Subject to the terms of this Agreement, the Joint Steering Committee shall have the following responsibilities:

(a) to oversee, review and coordinate the Parties' activities under the Research Plan, and communicate any updates regarding the Services

(b) to review and approve any amendments or updates to the Research Plan; and

(c) to perform such other duties as are specifically assigned to the JSC under this Agreement or upon mutual written agreement of the Parties.

[***]

3.4 Meetings. The Joint Steering Committee shall meet [***] (or as otherwise agreed to by the Parties). Such meetings may be conducted in person [***] and by videoconference or by teleconference [***]. Each Party shall bear its own expenses in connection with its participation on the JSC.

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3.5 JSC Decisions. The Joint Steering Committee shall work in good faith [***] on any action, decision or other matter for which it has authority under this Agreement, with each Party having one vote. [***]. In the event that the Joint Steering Committee does not agree on any such action, decision or other matter within the scope of its responsibility, [***] shall have the final decision-making authority with respect to such action, decision or other matter.

4. Records; Reports; Further Assurances.

4.1 Records. In connection with the Services performed hereunder, Caribou shall maintain laboratory notebooks, records and data ("Records") in accordance with applicable laws, rules, regulations, and industry standards and the Research Plan, during the Term and for [***] thereafter. [***]. [***] shall have the right to inspect and make copies of the Records upon reasonable advance written notice to Caribou and not more than [***] times per calendar year during the period the Records are to be retained by Caribou; provided, however, that the JSC shall have access to the Records as reasonably necessary for the JSC to discharge its responsibilities under Section 3 hereof.

4.2 Reports. Caribou shall provide Intellia with written [***] reports summarizing the results of the Services during the preceding [***] ("Reports"). Caribou may deliver to Intellia such Reports at the JSC meetings, or as otherwise specified in the Research Plan. [***].

5. Proprietary Rights.

5.1 Definitions. As used in this Agreement,

(a) "Intellectual Property Rights" means all current and future worldwide patents and patent rights, trade secrets, copyrights and all other intellectual property rights, including without limitation all applications and registrations with respect thereto; and

(b) "Technology" shall mean all tangible and intangible results and items arising out of or constituting the results of the Services [***].

5.2 Ownership. Caribou shall own and retain all rights, title and interest in and to the Technology. Intellia shall assign and hereby assigns to Caribou any and all rights, title and interest it may have in and to the Technology, subject to the license set forth in Section 5.3(a) below.

5.3 Licenses.

(a) The Technology shall be included in the Caribou IP (as defined in the License Agreement) and subject to the rights and licenses granted to Intellia under the Caribou IP pursuant to the License Agreement.

(b) Intellia hereby grants Caribou a nonexclusive license under any Intellectual Property Rights owned or controlled by Intellia solely to the extent necessary to perform the Services.

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6. Confidentiality.

6.1 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 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, pursuant to this Agreement of the License Agreement.

6.2 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 or in the License Agreement, 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 6.4.

6.3 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 6.2 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.

6.4 Permitted Use and Disclosures. Receiving Party may use and disclose Disclosing Party's Confidential Information to the extent (and only to the extent) such use or 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 filing and prosecuting patents;

(c) in performing its obligations and exercising its rights under this Agreement; and

(d) to its Affiliates and potential and actual contractors, licensees 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 its rights under this Agreement.

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In the case of a disclosure pursuant to (i) Sections 6.4(a) or 6.4(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 6.4(c) or 6.4(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 6.2 (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.

6.5 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 6.4, 6.5(b) and 6.5(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 intends to 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 6.5(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. Except as required by applicable law or otherwise agreed pursuant to the License Agreement, neither Party may issue any 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 6.4(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.

(d) Publications. Each Party recognizes that the other Party may wish to publish or present information relating to its activities in its respective field. Each Party (the "Publishing Party") will first submit to the other Party (the "Non-Publishing Party") an early draft of any such (i) publications at least [***] days prior to submission for publication or (ii) presentations at least [***] days prior to the presentation [***], for the Non-Publishing Party to review such proposed publication or presentation for unauthorized disclosure of such Non-Publishing Party's Confidential Information and for potential patent right or other intellectual property rights protection. The Non-Publishing Party shall inform the Publishing Party at least [***] days prior to the publication submission day or [***] days prior to the presentation date whether (i) the proposed publication or presentation contains Confidential Information of the Non-Publishing Party, in which case the Publishing Party will delete such Confidential Information from its proposed publication or presentation and/or (ii) the publication or presentation contain subject matter that, if published would adversely affect either Party's Intellectual Property Rights, in which case the Publishing Party will delay submission of its publication or presentation for an additional period, not to exceed [***] days, in order to allow for the filing of a patent application or other appropriate intellectual property protection. Once a presentation has been reviewed by the Non-Publishing Party under this section, it can be used again by the Publishing Party without need for resubmission.

7. Warranties.

7.1 Caribou represents and warrants that the Services will be performed in a professional and workman-like manner; (ii) in good scientific manner and in compliance in all material respects with all applicable laws [***]; and (iii) in accordance with the Research Plan. The JSC will be permitted to inspect and audit Caribou's facilities in order to ensure compliance with the foregoing upon reasonable prior written notice to Caribou [***].

7.2 Each party represents and warrants that (a) it has the full corporate power and authority to enter into this Agreement, (b) this Agreement has been duly authorized, and (c) this Agreement is binding upon it.

7.3 Caribou acknowledges and agrees that it is responsible for payment of compensation to Caribou's personnel, and all related federal and state income tax withholding, social security taxes, and unemployment or disability insurance applicable to such personnel, and Caribou will indemnify Intellia, its Affiliates (as defined in the License Agreement) and their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, "Intellia Indemnitees") and hold the Intellia Indemnitees harmless to the extent of any obligation imposed by law on any Intellia Indemnitee to pay any such amounts in connection with any payments made by Intellia to Caribou under this Agreement on account of Caribou or Caribou's agents or employees.

8. Limits on Liability. [***]

9. Term and Termination.

9.1 Term. Unless terminated earlier pursuant to Section 9.2 below, this Agreement will commence on the Effective Date and expire upon [***].

9.2 Termination. In the event of any material breach of this Agreement, the non-breaching party may provide written notice declaring and describing the material breach in sufficient detail to enable the breaching party to make the cure. The breaching party then has [***] days to cure the breach. If the breach is not cured within that period or if the breach is not curable, then after that period the non-breaching party may provide a second written notice to effectuate the termination of this Agreement and/or to exercise its other remedies.

9.3 Return of Materials. Within [***] days following any expiration or termination of this Agreement, each party shall return any and all instrumentation owned by the other party, including any Confidential Information exchanged during the term of this Agreement and any copies thereof; provided that each Party may retain the Confidential Information of the other Party to the extent necessary to exercise any remaining rights or fulfill any outstanding obligations under this Agreement or the License Agreement.

9.4 Survival. Notwithstanding anything herein to the contrary, the terms, conditions and obligations under Sections [***] of this Agreement shall survive the termination of this Agreement, provided that such surviving terms shall not serve to limit any obligation of either Party under any other agreement between the Parties [***].

10. Export Controls. The Parties each agree to comply with all applicable laws, regulations and restrictions of the United States concerning the export of products, technical data and direct products thereof including, without limitation, all regulations regarding export, asset control and destination control of the United States Government or any agency thereof.

11. General Provisions.

11.1 Disputes Resolution. Disputes of any nature arising under, relating to, or in connection with this Agreement ("Disputes") will be resolved pursuant to the dispute resolution mechanism set forth in Section 8.1 of the License Agreement.

11.2 Cumulative Remedies. 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.

11.3 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.

11.4 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.

11.5 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.

11.6 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.

11.7 Headings. All headings in this Agreement are for convenience only and will not affect the meaning of any provision hereof.

11.8 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.

11.9 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.

11.10 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.

11.11 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 11.11.

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

11.12 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.

11.13 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.

11.14 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.

11.15 Entire Agreement. This Agreement (along with the Research Plan and, where expressly incorporated herein, the License Agreement) 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.

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Execution Copy

IN WITNESS WHEREOF, the Parties have caused this Services 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 10.5

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

EXECUTION VERSION

License and Collaborative Research Agreement

License and Collaborative Research Agreement ("Agreement"), effective December 18, 2014 ("Effective Date"), by and between Novartis Institutes for BioMedical Research, Inc., a Delaware corporation with its principal place of business at 250 Massachusetts Avenue, Cambridge, MA 02139 USA ("Novartis"), and Intellia Therapeutics, Inc., a Delaware corporation with its principal place of business at 130 Brookline Street, Suite 201, Cambridge, MA 02139 USA ("Intellia"). Novartis and Intellia are each separately referred to as a "Party" and are collectively referred to as the "Parties".

Whereas, Intellia is a biopharmaceutical company that has licensed and is developing a CRISPR System that permits genomic editing for the research, Development and Commercialization of therapeutic, prophylactic, and palliative applications;

Whereas, Novartis possesses expertise in discovering, developing, manufacturing, marketing, and selling pharmaceutical products worldwide; and

Whereas, the Parties wish to further develop Intellia's platform and discover therapeutic, prophylactic, and palliative products and services generated through the use of that technology.

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

In consideration of the respective representations, warranties, covenants, and agreements contained herein, and for other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

ARTICLE I
CERTAIN DEFINITIONS; RULES OF INTERPRETATION

Section 1.1 Certain Definitions.

For the purpose of this Agreement, the following terms, whether used in singular or plural form, will have the meanings set forth below:

"Accounting Standards" means, with respect to Novartis, the International Financial Reporting Standards ("IFRS") and, with respect to Intellia, US Generally Accepted Accounting Principles ("US GAAP"), in each case, as generally and consistently applied throughout the Party's organization.

"Additional Selected HSC Product" means an HSC Product directed to an Additional Selected HSC Target that is researched, Developed, or Commercialized by Novartis, its Affiliates, or their sublicensees.

"Additional Selected HSC Target" has the meaning set forth in Section 2.2.4(a).

"Advanced CART Product" means a CART Product directed to a CART Therapeutic Target and a certain Advanced CART Target that Novartis, its Affiliates, or their sublicensees is researching, Developing, or Commercializing.

"Advanced CART Target" means [***] that a specified CART Product is directed toward. [***]

"Affiliate" means, with respect to a specified Person, a Person that directly or indirectly controls, is controlled by, or is under common control with such Person. For the purpose of this definition, "control" or "controlled" means direct or indirect ownership of 50% or more of the shares of stock entitled to vote for the election of directors in the case of a corporation, ownership of 50% or more of the equity interest in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby the Person controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity or the ability to otherwise cause the direction of the management or policies of the corporation or other

entity. The Parties acknowledge that, in the case of entities organized under the Applicable Laws of certain countries where the maximum percentage ownership permitted by Applicable Law for a foreign investor is less than 50%, such lower percentage will be substituted in the preceding sentence; *provided*, that such foreign investor has the power to direct the management and policies of such entity. "Affiliate" shall not include any investment fund or any other Person or entity controlled by such investment fund [***].

"Agreement" has the meaning set forth in the preamble, and will include, for the avoidance of doubt, all Exhibits attached hereto.

"Agreement Term" has the meaning set forth in Section 11.1.

"Alliance Manager" has the meaning set forth in Section 3.4.

"Annual Net Sales" means, with respect to a Product, the Net Sales of such Product during a Calendar Year.

"Applicable Law" means any applicable national, supranational, federal, state, local or foreign law, statute, ordinance, principle of common law, or any rule, regulation, standard, judgment, order, writ, injunction, decree, arbitration award, agency requirement, license, or permit of any Governmental Authority, including any rules, regulations, guidelines, or other requirements of Regulatory Authorities.

"Approval Milestone" has the meaning set forth in Section 7.3.3.

"Approved Internalized Target" has the meaning set forth in Section 6.4.

"Auditor" has the meaning set forth in Section 7.8.2.

"Business Day" means a day other than a Saturday, Sunday, or public holiday during which banks are authorized to be closed in Cambridge, Massachusetts.

"Calendar Quarter" means each calendar quarter ending on March 31, June 30, September 30, or December 31.

"Calendar Year" means each calendar year ending on December 31.

"Caribou" means Caribou Biosciences, Inc., a Delaware corporation.

"Caribou-Berkeley-Vienna Agreement" means the Exclusive License by and among Caribou, the Regents of the University of California, and the University of Vienna, dated [***], as amended from time to time.

"Caribou-Intellia License Agreement" means the License Agreement by and between Caribou and Intellia, dated [***], as amended from time to time.

"Caribou-Wageningen Agreement" means the Exclusive Assignment Agreement, by and between Caribou and Wageningen Universiteit, dated [***], as amended from time to time.

"Chimeric Antigen Receptor" or "CAR" means [***].

"CART" means an engineered CAR-modified T-cell.

"CART Budget" has the meaning set forth in Section 2.3.

"CART CRISPR Target" means the [***].

"CART Field" means the *ex vivo* use of CARTs [***], as a therapeutic, prophylactic, or palliative of any human disease. By *ex vivo*, it is meant that the modification of cells occurs *ex vivo*, and the CART is then administered to patients. [***].

[***]

"CART Product" means a product or service that Novartis, its Affiliates, or their sublicensees is researching, Developing, or Commercializing for use in the CART Field the research, development, manufacture, use, sale or import of which Practices Intellia Intellectual Property or Collaboration Intellectual Property.

"CART Program" has the meaning set forth in Section 2.1.1.

"CART Program Target" means the [***]

"CART Research Plan" has the meaning set forth in Section 2.3.

"CART Steering Committee" has the meaning set forth in Section 3.1.2.

"CART Target Product" means and includes any and all Advanced CART Products directed to [***].

"CART Therapeutic Target" means the [***].

[***].

"Co-Chair" has the meaning set forth in Section 3.2.3.

[***]

"Collaboration" has the meaning set forth in Section 2.1.1.

"Collaboration Intellectual Property" means all Intellectual Property Rights created, conceived of, or reduced to practice by either of or jointly by the Parties, their Affiliates, or its or their employees, agents or subcontractors during the Research Term in the conduct of the Collaboration. Collaboration Intellectual Property will consist of Collaboration Platform Intellectual Property and Collaboration Product Intellectual Property. [***]

"Collaboration Platform Intellectual Property" means all Collaboration Intellectual Property relating to **(a)** [***]; or **(b)** any and all improvements or modifications to [***].

"Collaboration Product" means an HSC Product, CART Product, and/or In Vivo Product.

"Collaboration Product Intellectual Property" means all Collaboration Intellectual Property other than Collaboration Platform Intellectual Property.

"Commercialization" or "Commercialize" means [***].

"Commercially Reasonable Efforts" means those efforts and resources consistent with the usual practices of the relevant Party in pursuing the research, Development, or Commercialization of a similarly situated pharmaceutical product or service at a similar stage of Development or Commercialization [***].

"Committee" has the meaning set forth in Section 3.2.1.

[***]

"Confidential Information" means all Know How or other information, including proprietary information and materials (whether or not patentable) regarding a Party's technology, products, services, business information, or objectives, that is treated as confidential by the disclosing Party in the regular course of business or is otherwise designated as confidential by the disclosing Party, whether existing before or after the Effective Date. For the avoidance of doubt, **(a)** [***] provided by Novartis will be deemed to be Novartis' Confidential Information; **(b)** [***] provided by Intellia, will be deemed to be Intellia's Confidential Information; and **(c)** the terms of this Agreement will be deemed to be the Confidential Information of both Parties.

"Confidentiality Agreement" means [***].

"Contract Year" means each successive twelve month period following the Effective Date.

"Control" or "Controlled" means, with respect to any Intellectual Property Right the possession by a Party (whether by ownership, license or otherwise) of the ability to grant access to, or a license or sublicense of, such rights or property, without **(i)** violating the terms of any agreement or other arrangement with any Third Party in existence, or **(ii)** having an obligation to pay any royalties or other consideration therefor that the other contracting Party declines to assume pursuant to the election procedures of Section 7.6.2(a) or Section 7.6.2(c), as applicable, at the time such Party would first be required hereunder to grant the other Party such access, license or sublicense.

"CRISPR" means clustered regularly interspaced short palindromic repeats.

"CRISPR System" means [***].

[***]

"Develop" or "Development" means [***].

"Development Milestone" has the meaning set forth in Section 7.3.3.

"Diligence Package" has the meaning set forth in Section 2.2.5.

"directed," "directed to," "directed toward" means, with respect to any specific Product, that the Product derives its, therapeutic, prophylactic or palliative benefit from [***].

"Disclaiming Party" has the meaning set forth in Section 5.2.3(c).

"Effective Date" has the meaning set forth in the preamble.

"EMA" means the European Medicines Agency or any successor agency thereto.

"Equity Agreements" means that Unit Purchase Agreement, dated September 17, 2014, by and among Intellia Therapeutics, LLC, Atlas Venture Fund IX, L.P. and Novartis, and that Amended and Restated Operating Agreement of Intellia Therapeutics, LLC, dated as of September 17, 2014, each as amended, waived or superseded from time to time.

"EU" means the European Union, as its membership may be constituted from time to time, and any successor thereto [***].

"Excluded Intellia New In-Licensed Intellectual Property" has the meaning set forth in Section 7.6.2(a).

[***]

"Excluded In Vivo Targets" has the meaning set forth in Section 2.4.2(b).

"Excluded Novartis New In-Licensed Platform Intellectual Property" has the meaning set forth in Section 7.6.2(c).

"Expert" has the meaning set forth in Section 12.2.2(b)(i).

"Extensions" has the meaning set forth in Section 5.2.3(b).

"FDA" means the United States Food and Drug Administration or any successor agency thereto.

"First Commercial Sale" means the first arm's length sale of a Product by Novartis, its Affiliates, or their licensees to a Third Party (or an Intellia HSC Product by Intellia, its Affiliates, or their licensees to a Third Party) in a country following Regulatory Approval of such Product (or the Intellia HSC Product, as applicable) in that country or, if no such Regulatory Approval is required for the sale of a Product (or Intellia HSC Product) in a country, the date upon which such Product (or Intellia HSC Product) is first commercially launched in such country.

"FTE Rate" means a rate of [***] per FTE (as defined herein) per annum based on the yearly time of [***] full-time equivalent Qualified Scientific Employee during the Research Term, consisting of a total of [***] hours per annum ("FTE"), to be pro-rated on a daily basis if necessary (per annum amount to be divided by [***] to produce the rate per whole day consisting of [***] hours), such rate to be restricted to scientific work. For the purpose of this definition, a "Qualified Scientific Employee" means a scientist with adequate scientific knowledge, training, and experience to conduct the work assigned to him or her.

"FPFD" means, with respect to a clinical trial, the first dosing of the first patient in such clinical trial.

"Generic Equivalent" means, with respect to a particular Product in a country, any product that **(a)** has Regulatory Approval for use in such country pursuant to a regulatory process governing approval of generic, interchangeable or biosimilar pharmaceutical or

biological product based on the then-current standards for regulatory approval in such country, where such regulatory approval relied on or incorporated clinical data generated by either Party pursuant to this Agreement or was obtained using an abbreviated, expedited or other similar process; **(b)** during the Agreement Term, is not owned or licensed by Novartis (in the case of Products Commercialized by Novartis, its Affiliates, or their sublicensees) or by Intellia (in the case of Intellia Products Commercialized by Intellia, its Affiliates, or their sublicensees) under this Agreement, and **(c)** is sold in the same country as the relevant Product by a Third Party that is not a sublicensee of Novartis (in the case of Products Commercialized by Novartis, its Affiliates, or their sublicensees) or by Intellia (in the case of Intellia Products Commercialized by Intellia, its Affiliates, or their sublicensees), and that did not purchase such product in a chain of distribution that included Novartis or Intellia, as applicable, or of any of their respective Affiliates or sublicensees.

"GLP" means Good Laboratory Practices, as contemplated by 21 C.F.R. Part 58 in the United States, and the equivalent or corresponding provisions of Applicable Laws of other jurisdictions.

"GLP Toxicology" means a toxicology study that is commenced in compliance with GLP in a manner such that the resulting data would be admissible to applicable Regulatory Authorities to support an IND.

"Government Authority" means any domestic or foreign entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including any governmental authority, agency, department, board, commission, court, tribunal, judicial body or instrumentality of any union of nations, federation, nation, state, municipality, county, locality or other political subdivision thereof.

"HSC" means hematopoietic stem cells, [***].

"HSC Budget" has the meaning set forth in Section 2.2.2(b).

"HSC Field" means the *ex vivo* use of a CRISPR System directed to a Target to research, Develop, or Commercialize (including without limitation the provision of services, to the extent required for such Commercialization) HSC Products or services directed to a Target as a therapeutic, prophylactic, or palliative of any human disease. For the purpose of this definition, "*ex vivo*" means that the CRISPR System modification of the HSC occurs *ex vivo*, and the modified HSCs are then administered to patients.

"HSC Product" means a product or service that Novartis, its Affiliates, or their sublicensees is researching, Developing, or Commercializing for use in the HSC Field the research, development, manufacture, use, sale or import of which Practices Intellia Intellectual Property or Collaboration Intellectual Property.

"HSC Program" has the meaning set forth in Section 2.1.1.

"HSC Research Plan" has the meaning set forth in Section 2.2.2(a).

"HSC Steering Committee" has the meaning set forth in Section 3.1.2.

"HSC Target Product" means and includes any and all HSC Products directed to the [***].

"Included Intellia New In-Licensed Intellectual Property" has the meaning set forth in Section 7.6.2(a).

"Included Novartis New In-Licensed Platform Intellectual Property" has the meaning set forth in Section 7.6.2(c).

"IND" means an Investigational New Drug application in the US filed with the FDA or the corresponding application for the investigation of a Product in any other country or group of countries, as defined in the applicable laws and regulations and filed with the Regulatory Authority of such given country or group of countries.

"Indemnified Party" has the meaning set forth in Section 10.3.

"Indemnifying Party" has the meaning set forth in Section 10.3.

"Indication" means a specific disease, impairment, or medical condition that is the intended subject of a therapeutic, prophylactic, or palliative product or service. [***].

"Insolvency Event" means **(a)** a Party ceases to function as a going concern by suspending or discontinuing its business; **(b)** a Party becomes insolvent (*i.e.*, is unable to pay its debts as they become due); **(c)** a Party is the subject of voluntary or involuntary bankruptcy proceedings instituted on behalf of or against such Party (except for involuntary bankruptcy proceedings that are dismissed within [***] days); **(d)** an administrative receiver, receiver and manager, interim receiver, custodian, sequestrator, or similar officer is appointed for a Party; **(e)** a notice to convene a directors', shareholders', or creditors' meeting for the purpose of passing a resolution to wind up a Party is issued or such a resolution is passed; **(f)** a resolution will have been passed by a Party or the Party's directors to make an application for an administration order or to appoint an administrator; **(g)** a Party proposes or makes any general assignment, composition, or arrangement with or for the benefit of all or some of its creditors; or **(h)** a Party makes or suspends or threatens to suspend making payments to all or some of its creditors or submits to any type of a similar voluntary arrangement.

"Intellectual Property Rights" means Patent Rights and Know How.

[***]

[***]

[***]

"Intellia HSC Product" means a product or service in the HSC Field directed to an Intellia Selected HSC Target.

"Intellia Intellectual Property" means all Intellectual Property Rights Controlled by Intellia or its Affiliates relating to CRISPR Systems, or necessary or useful to research, Develop, manufacture or Commercialize products or services in the HSC Field, CART Field or In Vivo Field that are in existence **(a)** as of the Effective Date [***].

"Intellia Net Sales" has the meaning set forth in Section 7.4.8.

"Intellia New In-Licensed Intellectual Property" has the meaning set forth in Section 7.6.2(a).

"Intellia Platform" means Intellia's proprietary CRISPR System, as claimed by the Intellia Intellectual Property, together with all improvements thereto (including Collaboration Platform Intellectual Property).

"Intellia Selected HSC Targets" means the [***] HSC Targets selected by Intellia for its exclusive research under this Agreement in accordance with Section 2.2.3(a).

[***]

[***]

"In Vivo Budget" has the meaning set forth in Section 2.4.3.

"In Vivo Field" means the use of CRISPR System for the *in vivo* treatment or prevention of any human disease. By "*in vivo*", it is meant that the modification of the relevant Target occurs *in vivo*.

"In Vivo Product" means a product or service that Novartis, its Affiliates, or their sublicensees is researching, Developing, or Commercializing for use in the In Vivo Field the research, development, manufacture, use, sale or import of which Practices Intellia Intellectual Property or Collaboration Intellectual Property.

"In Vivo Program" has the meaning set forth in Section 2.1.1.

"In Vivo Research Plan" has the meaning set forth in Section 2.4.3.

"In Vivo Target Product" means and includes [***] In Vivo Products directed to the [***] Novartis Selected In Vivo Target.

"In Vivo Steering Committee" has the meaning set forth in Section 3.1.2.

"Invoice" means an invoice substantially in the form attached as *Exhibit A*.

"Joint Steering Committee" or "JSC" has the meaning set forth in Section 3.1.1.

"Key License Agreements" has the meaning set forth in Section 9.2(a).

"Know How" means any information, inventions, trade secrets or technology, whether or not proprietary or patentable and whether stored or transmitted in oral, documentary, electronic, or other form. Know How will include inventions, ideas, concepts, formulas, methods, procedures, designs, compositions, plans, documents, data, discoveries, developments, techniques, protocols, specifications, works of authorship, biological materials, and any information relating to research and development plans, experiments, results, compounds, therapeutic leads, candidates and products, services and service protocols, clinical and preclinical data, clinical trial results, and manufacturing information and plans.

"Labeled Indication" means any Indication of a Product as set forth in the Product's label as approved by the relevant Regulatory Authority. "Initial Labeled Indication" means any Labeled Indication upon a Product's initial receipt of Regulatory Approval (regardless of the number of Indications described). "Additional Labeled Indication" means any Labeled Indication added to a Product's label after the Initial Labeled Indication or expanding the scope of a previous Labeled Indication, which is approved by way of a supplemental Regulatory Approval (*e.g.*, by way of sNDA or sBLA) [***].

"Loss" has the meaning set forth in Section 10.1.

"Loss of Market Exclusivity" means, with respect to any Product in any country, the Net Sales of such Product in that country in any Calendar Year are less than [***]% as compared with the Net Sales of such Product in that country in the Calendar Year immediately preceding the marketing or sale of the first Generic Equivalent of such Product.

"Materials" means any materials provided or transferred by one Party or its Affiliates to the other Party or its Affiliates in connection with the Collaboration. In the

case of biological Materials, the term will encompass any medium in which the Materials are provided, any parts of the Materials [***], any modified or unmodified progeny of or descendant from the Materials [***].

"Milestone Payment" has the meaning set forth in Section 7.3.1.

"Milestones" has the meaning set forth in Section 7.3.1.

"Net Sales" means the net sales recorded by Novartis or any of its Affiliates or licensees [***]

[***]

"Nominated CART Program Target" has the meaning set forth in Section 2.3.

"Nominated HSC Target" has the meaning set forth in Section 2.2.1.

"Novartis HSC Background Intellectual Property" means the compound identified on *Exhibit B*, and any Patent Rights and Know How covering or claiming such compound, including its composition of matter, formulation, method of use or manufacture, but only with regards to such compound. For clarification purposes, Novartis HSC Background Intellectual Property does not include rights to any other compounds (including their composition of matter, formulation, method of use or manufacture) that may be covered or claimed by the same Patent Rights and Know How as those covering or claiming the compound identified on *Exhibit B*.

"Novartis New In-Licensed Platform Intellectual Property" has the meaning set forth in Section 7.6.2(c).

"Novartis Other Background Intellectual Property" means the Patent Rights and Know How identified on *Exhibit C*.

[***].

"Novartis Selected HSC Product" means an HSC Product directed to a Novartis Selected HSC Target that is researched, Developed, or Commercialized by Novartis, its Affiliates, or their sublicensees.

"Novartis Selected HSC Targets" means the [***] HSC Targets selected by Novartis for its exclusive research under this Agreement in accordance with Section 2.2.3(a).

"Novartis Selected In Vivo Product" means an In Vivo Product directed to a Novartis Selected In Vivo Target that is researched, Developed, or Commercialized by Novartis, its Affiliates, or their sublicensees.

"Novartis Selected In Vivo Target" has the meaning set forth in Section 2.4.2(a).

[***]

"Paragraph IV Certification" has the meaning set forth in Section 5.2.3(b).

"Party" and "Parties" has the meaning set forth in the preamble.

"Patent Rights" means patents and all substitutions, divisions, continuations, continuations-in-part, reissues, reexaminations, and extensions thereof and supplemental protection certificates relating thereto, and all counterparts thereof or substantial equivalents in any country (collectively, "Patents"), and any applications or provisional applications for any of the foregoing ("Patent Applications") and including the right to claim all benefits and priority rights to any Patent Applications under any applicable convention.

"Person" means any corporation, limited or general partnership, limited liability company, joint venture, trust, unincorporated association, governmental body, authority, bureau or agency, any other entity or body, or an individual.

"Personal Information" has the meaning set forth in Section 9.4.2.

"Phase II Trial" means a study in humans of the safety, dose ranging and efficacy of a product, as further defined in 21 C.F.R. § 312.21(b) or foreign counterparts, as may be conducted anywhere in the world.

"Phase IIa Trial" means a small scale Phase II Trial intended principally to demonstrate the proof of concept of a pharmaceutical product in humans to determine whether (and in what manner) to pursue Regulatory Approval of such product.

"Phase IIb Trial" means any controlled dose ranging Phase II Trial of a pharmaceutical product to further evaluate the efficacy and safety of the product in its target patient population and to define the product's optimal dosing regimen, as may be conducted anywhere in the world, and in any case that is designed to obtain data to select particular doses to be used in a Phase III Trial.

"Phase III Trial" means, with respect to a pharmaceutical product, a clinical trial on sufficient numbers of human patients that is designed to establish that such pharmaceutical product is safe and efficacious for its intended use, and to define warnings, precautions, and adverse reactions that are associated with such pharmaceutical product in the dosage range to be prescribed, that directly supports Regulatory Approval or label expansion of such pharmaceutical product, as described in 21 C.F.R. §312.21(c) or foreign counterparts, as may be conducted anywhere in the world.

[***]

[***]

[***]

[***]

[***]

[***]

"Practice" means, with respect to Patent Rights, to make, use, sell, offer for sale, or import (or have made, have used, have sold, have offered for sale, or have imported), and, with respect to Know How, to use, practice and disclose (or have used, practiced and disclosed).

"Prescriber" means a United States healthcare professional authorized to prescribe a pharmaceutical product or issue hospital orders for a pharmaceutical product, or those other allied professionals that are part of the treatment team and who are recognized for this purpose in the Commercialization plan, as applicable.

"Product" means, without distinction, a Collaboration Product [***].

"Program" means, without distinction, the HSC Program, the CART Program, and any In Vivo Program.

[***]

"Regulatory Approval" means, with respect to a pharmaceutical product or service in any country or jurisdiction, any approval, registration, license or authorization from a Regulatory Authority in a country or other jurisdiction that is reasonably necessary to market and sell a pharmaceutical product or to provide a service in such country or jurisdiction (including, *e.g.*, any applicable pricing and reimbursement approvals).

"Regulatory Authority" means any Governmental Authority responsible for authorizing or approving the marketing and/or sale of pharmaceutical products or services in a jurisdiction (*e.g.*, the FDA, EMA, the Japanese Ministry of Health, Labor and Welfare, and corresponding national or regional regulatory agencies or organizations).

"Regulatory Filing" means, with respect to any pharmaceutical product or service, any submission to a Regulatory Authority of any appropriate regulatory application, and will include, without limitation, any submission to a regulatory advisory board, marketing

authorization application, and any supplement or amendment thereto. For the avoidance of doubt, the term Regulatory Filings will include any IND, New Drug Application, or the corresponding application in under the Applicable Law of the other jurisdictions.

"Research Plans" means, collectively and without distinction, the HSC Research Plan, the CART Research Plan, and/or any In Vivo Research Plan.

"Research Program" means, without distinction, the HSC Program, the CART Program, and/or the In Vivo Program.

"Research Term" has the meaning set forth in Section 2.1.2.

[***]

"Royalty" has the meaning set forth in Section 7.4.1.

"Royalty Term" means, with respect to each Product in each country [***].

"Sales Milestone" has the meaning set forth in Section 7.5.

"Sales Milestone Payment" has the meaning set forth in Section 7.5.

"Senior Officers" means [***].

[***]

"Subcommittees" has the meaning set forth in Section 3.1.2.

"Target" means [***].

"Third Party" means any Person other than Intellia or Novartis and their respective Affiliates.

"Third Party HSC Collaboration" has the meaning set forth in Section 2.2.5.

"Valid Claim" means a claim of an issued and unexpired Patent included within the Intellia Intellectual Property or the Collaboration Intellectual Property [***].

Section 1.2 Rules of Interpretation.

In this Agreement, unless otherwise specified:

(a) "includes" and "including" will mean including without limitation, and "or" will mean "and/or";

(b) a reference to an Article of this Agreement includes all Sections of that Article, and a reference to a Section of this Agreement includes all subsections of that Section;

(c) "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;

(d) a "Party" includes its permitted assignees and/or the respective successors in title to substantially the whole of its undertaking;

(e) a statute or statutory instrument or any of their provisions is to be construed as a reference to that statute or statutory instrument or such provision as the same may have been or may from time to time hereafter be amended or re-enacted;

(f) words denoting the singular will include the plural and vice versa and words denoting any gender will include all genders;

(g) except where otherwise indicated, references to a "license" will include "sublicense" and references to a "licensee" will include "sublicensee", unless the context otherwise provides;

(h) the Exhibits form part of the operative provision of this Agreement and references to this Agreement will, unless the context otherwise requires, include references to the Exhibits;

(i) the headings in this Agreement are for convenience only and will not be considered in the interpretation of this Agreement; and

(j) the terms and conditions of this Agreement are the result of negotiations between the Parties and this Agreement will not be construed in favor of or against any Party by reason of the extent to which either Party participated in the preparation of this Agreement.

ARTICLE II
COLLABORATION

Section 2.1 Overview; Research Term; Efforts.

2.1.1 Goals. The Parties will engage in collaborative research activities in accordance with the terms and conditions of this Agreement and the Research Plans. As set forth in the Research Plans, the goals of these activities are to identify and research therapeutic, prophylactic, and palliative products and services utilizing **(a)** *ex vivo* HSC applications of the Intellia Platform (as described in the HSC Research Plan and Section 2.2 of this Agreement, the "HSC Program"), **(b)** *ex vivo* CART applications of the Intellia Platform (as described in the CART Research Plan and Section 2.3 of this Agreement, the "CART Program"), and **(c)** *in vivo* applications of the Intellia Platform (as described in any In Vivo Research Plan(s) and Section 2.4 of this Agreement, the "In Vivo Program"). The CART Program, HSC Program, and In Vivo Program collectively comprise the "Collaboration". During the Research Term, each Party shall conduct all activities relating to the HSC Field, CART Field, and, subject to Section 2.4.3, the In Vivo Field, as well as identification of Targets and the research and Development of Products directed to such Targets, under the corresponding HSC Research Plan, CART Research Plan, and, subject to Section 2.4.3, In Vivo Research Plan unless otherwise expressly provided by this Agreement.

2.1.2 Research Term. Unless terminated in accordance with Section 11.2, the Collaboration will commence on the Effective Date and expire on the fifth anniversary of the Effective Date (the "Research Term").

2.1.3 Efforts; Information Sharing Generally. During the Research Term, each Party will use Commercially Reasonable Efforts to carry out the activities assigned to it in the relevant Research Plan. Without limiting any other obligations set forth in this Agreement, at all times during the Research Term, each Party will keep the other Party reasonably and timely informed as to its Collaboration research efforts and results thereof.

Section 2.2 HSC Program.

2.2.1 HSC Program Generally. In the HSC Program, the Parties will research potential therapeutic, prophylactic, and palliative applications of the Intellia Platform in the HSC Field as provided in the HSC Research Plan. The Parties will initially conduct research activities in the HSC Field under the HSC Research Plan with respect to Targets nominated by the HSC Steering Committee (each, a "Nominated HSC Target"), and products and services directed to those Nominated HSC Targets. Selections pursuant 2.2.3 and 2.2.4 will be made from the pool of Nominated HSC Targets. [***]

2.2.2 Scope of HSC Program Activities; Research Plan.

(a) An initial research plan for the HSC Program (the "HSC Research Plan") will be agreed upon by the Parties not later than [***], and, as agreed, shall be deemed a part of this Agreement. The JSC may amend the HSC Research Plan from time to time to nominate or remove HSC Targets from the scope of the HSC Program [***] and to add, remove or modify research and Development activities assigned to either Party under the HSC Program.

(b) The HSC Steering Committee will amend the HSC Research Plan as necessary to reflect scientific developments as the HSC Program research activities progress, as well as the nomination or selection of any other Nominated HSC Targets. The HSC Research Plan will **(i)** define the scope of the HSC Program; **(ii)** describe the Parties' respective responsibilities in the HSC Program; **(iii)** describe the HSC Program's anticipated research timeline; **(iv)** include a

budget for Intellia's activities in the HSC Program (the "HSC Budget"), which must be consistent with the terms of this Agreement. If a conflict between the terms of the HSC Research Plan and the terms of this Agreement arises, the provisions of this Agreement will govern.

2.2.3 Selection of Exclusive Selected HSC Targets.

(a) During the Research Term, Novartis will have the right to select up to [***] HSC Targets (the "Novartis Selected HSC Targets") for its exclusive research, and Intellia will have the right to select up to [***] HSC Targets (the "Intellia Selected HSC Targets") for its exclusive research, in each case in the following manner:

[***]

(b) The rights set forth in Section 2.2.3(a) are subject to the following:

[***]

[***]

2.2.4 Selection of Additional Targets.

(a) During the Research Term and once the HSC Targets have been selected by the Parties pursuant to Section 2.2.3(a) [***], but in any event no later than [***] days prior to the expiration of the Research Term, Novartis will have the option to select up to an additional [***] HSC Targets (other than the Intellia Selected HSC Targets) on a non-exclusive basis (each, an "Additional Selected HSC Target"), subject to the payments set forth in Section 7.1.3.

(b) For clarity, unless the Parties agree otherwise in writing, during the Research Term there will not be more than **(i)** [***] HSC Targets comprising the Novartis Selected HSC Targets; **(ii)** [***] HSC Targets comprising the Additional Novartis Selected HSC Targets; and **(iii)** [***] HSC Targets comprising the Intellia Selected HSC Targets.

2.2.5 [***]

2.2.6 Diligence Obligations. Following the selection of each Novartis Selected HSC Target and any Additional Selected HSC Target, Novartis and its Affiliates will use Commercially Reasonable Efforts to research, Develop, and Commercialize [***] Novartis Selected HSC Product directed to such Novartis Selected HSC Target and [***] Additional Selected HSC Product directed to such Additional Selected HSC Target [***].

2.2.7 [***]

Section 2.3 CART Program.

An initial research plan for the CART Program (the "CART Research Plan") will be agreed upon by the Parties not later than [***], and, as agreed, shall be deemed a part of this Agreement. In the CART Program, the Parties will initially conduct research activities in the CART Field under the CART Research Plan with respect to CART Program Targets nominated by the CART Steering Committee (each, a "Nominated CART Program Target"), and products and services relating to CART Therapeutic Targets utilizing those Nominated CART Program Targets. [***]. The CART Research Plan will be revised by the JSC from time to time to reflect developments in the CART Research Program, including to add, remove or modify research and Development activities assigned to each Party under the CART Program. The CART Research Plan will **(i)** define the scope of the CART Program; **(ii)** describe the Parties' respective responsibilities in the CART Program; **(iii)** describe the CART Program's anticipated research timeline; **(iv)** include a budget for Intellia's activities in the CART Program (the "CART Budget"), which must be consistent with the terms of this Agreement. If a conflict between the terms of the CART Research Plan and the terms of this Agreement arises, the provisions of this Agreement will govern. Following the creation of each CART Product, Novartis and its Affiliates will use Commercially Reasonable Efforts to research, Develop, and Commercialize [***] CART Product directed to the relevant CART Therapeutic Target [***].

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Section 2.4 In Vivo Program.

2.4.1 In Vivo Program Generally. Subject to Sections 2.4.2 and 2.4.3, in the In Vivo Program, the Parties will research potential therapeutic, prophylactic, and palliative products and services directed to In Vivo Targets utilizing the Intellia Platform.

2.4.2 Scope of Program.

[***]

(b) Selection of Novartis Selected In Vivo Targets.

(i) Subject to Section 2.4.2(b)(ii), following the [***] (the "In Vivo Selection Period"), Novartis may select a Target that it proposes to be included in the scope of the In Vivo Program (each such Target, a "Proposed In Vivo Target"). In such event, Novartis will notify Intellia in writing of such proposal and disclose in such notice its Proposed In Vivo Target. Within [***] days after disclosure of the Proposed In Vivo Target, Intellia will review in good faith the Proposed In Vivo Target to determine if it is an Excluded In Vivo Target and, if it is not an Excluded In Vivo Target, will notify Novartis that such Proposed In Vivo Target will be included in the In Vivo Program (such Proposed In Vivo Target, a "Novartis Selected In Vivo Target"), and, if it is an Excluded In Vivo Target, will notify Novartis that such Proposed In Vivo Target cannot be included in the In Vivo Program as a Novartis Selected In Vivo Target. For purposes of this Section 2.4.2(b), an "Excluded In Vivo Target" means [***]. In the event that Novartis, acting reasonably and in good faith, believes that its Proposed In Vivo Target was wrongfully rejected by Intellia as an Excluded In Vivo Target, Novartis will have the right to submit the dispute about such determination to accelerated arbitration in

accordance with the procedures of Section 12.2.2(b). If the Expert's decision finds that such Proposed In Vivo Target is an Excluded In Vivo Target, such Proposed In Vivo Target will remain excluded from the In Vivo Program hereunder, and, if the Expert's decision finds that such Proposed In Vivo Target was wrongfully characterized as an Excluded In Vivo Target, it will be deemed included in the scope of the In Vivo Program hereunder from the date of such decision.

(ii) [***]

(iii) A maximum of [***] Novartis Selected In Vivo Targets may be selected on a non-exclusive basis during the In Vivo Selection Period [***].

2.4.3 Research Plan. Following the selection of each Novartis Selected In Vivo Target, Novartis may, in its sole discretion, offer to Intellia the ability to participate with Novartis in research and Development activities for such Novartis Selected In Vivo Target and In Vivo Products directed thereto during the Research Term. If Novartis elects to ask Intellia to participate in such activities and Intellia accepts (in its sole discretion), the Parties will agree upon a research plan for such Novartis Selected In Vivo Target (each, an "In Vivo Research Plan"). Each In Vivo Research Plan will be revised by the JSC from time to time to add, remove or modify research and Development activities assigned to each Party thereunder. Each In Vivo Research Plan will **(a)** describe the Parties' respective research and Development responsibilities with respect to the relevant Novartis Selected In Vivo Target and In Vivo Products directed thereto; **(b)** describe the anticipated timeline for such activities; **(c)** include a budget for the activities to be performed by Intellia (the "In Vivo Budget"), which must include funding for Intellia's activities that is incremental to the funding under the HSC Budget and CART Budget, but in all other ways consistent with the terms of this Agreement. If a conflict between the terms of the In Vivo Research Plan and the terms of this Agreement arises, the provisions of this Agreement will govern. [***]

2.4.4 Diligence Obligation. Following the selection of each Novartis Selected In Vivo Target, Novartis and its Affiliates will use Commercially Reasonable Efforts to research, Develop, and Commercialize [***] Novartis Selected In Vivo Product directed to such Novartis Selected In Vivo Target [***].

Section 2.5 Recording of Targets.

Following the selection or identification of each Novartis Selected HSC Target [***], Additional Selected HSC Target, Advanced CART Target, Novartis Selected In Vivo Targets [***], such Target will be added a list maintained by the JSC and deemed an Exhibit to this Agreement.

Section 2.6 Subcontracting Research Activities.

Each Party may subcontract any of the research activities to be performed by it in the Collaboration to a Third Party, *provided* that such Third Party will have entered into a written agreement with such Party that includes terms and conditions protecting and limiting use and disclosure of Confidential Information, Materials and Know-How of the other Party that are at least protective of such Confidential Information, Material and Know-How as under this Agreement and requiring such Third Party and its personnel to assign to such Party all right, title and interest in and to any Patents, Know-How and Materials created, conceived of, or developed in connection with the performance of subcontracted activities to the extent required for such Party to comply with the terms and conditions of this Agreement as if such subcontracted activities were performed by the subcontracting Party (including Article IV, Article V, and Article VI).

ARTICLE III
GOVERNANCE

Section 3.1 Establishment of Joint Steering Committee and Subcommittees.

3.1.1 Joint Steering Committee. [***] the Parties will establish a Joint Steering Committee (the "Joint Steering Committee" or "JSC"). The JSC will assume a general role of leadership in the Collaboration and will have responsibility for:

(a) facilitating communications between the Parties with respect to the research activities contemplated by this Agreement;

(b) overseeing the HSC Steering Committee, the CART Steering Committee, and the In Vivo Steering Committee;

(c) reviewing and approving changes to the HSC Research Plan, CART Research Plan, and In Vivo Research Plan that are proposed by the relevant Subcommittee;

(d) reviewing staffing and personnel issues, with the goal of maintaining, when determined appropriate, the continuity of personnel on Collaboration activities and reasonably evaluating, when determined appropriate, changes to the staffing of the Collaboration;

(e) coordinating strategies relating to Patent Rights claiming Collaboration Product Intellectual Property;

(f) prioritizing the allocation of resources dedicated to the Collaboration; and

(g) informally resolving disagreements between the Parties;

(h) facilitating discussions between the Parties with respect to potential collaborations and other activities related to the CRISPR System not contemplated by this Agreement [***].

The JSC will be comprised of [***] representatives from each of Intellia and Novartis, which (unless otherwise agreed upon between the Parties), will be equal to [***] members of each Party. The JSC will meet at least [***] (or more if agreed upon) in Cambridge, Massachusetts, unless otherwise agreed by the Parties.

3.1.2 Research Program Subcommittees. Within [***] days after the initial meeting of the JSC, the JSC will appoint the members of subcommittees for the HSC

Program (the "HSC Steering Committee") and CART Program (the "CART Steering Committee"). Within [***] days after the finalization of the first In Vivo Research Plan, the JSC will appoint the members of a subcommittee for the In Vivo Program (the "In Vivo Steering Committee"). The HSC Steering Committee, CART Steering Committee, and In Vivo Steering Committee are each without distinction referred to as a "Subcommittee" and are collectively referred to as the "Subcommittees". Members of any Subcommittee may be, but are not required to be, members of the JSC; *provided*, that each Subcommittee will have [***] representatives of both Parties. The Subcommittees will provide oversight of the respective Research Programs and will have responsibility for:

(a) determining the direction and planned activities of the respective Research Programs in compliance with the Research Plans;

(b) sharing information arising in the respective Research Programs between the Parties;

(c) coordinating activities relating to filing and prosecuting of Patent Applications and Patents claiming Collaboration Product Intellectual Property;

(d) coordinating research activities in the respective Research Programs in compliance with the Research Plans; and

(e) proposing amendments to the respective Research Plans, which must be approved by the JSC.

Each Subcommittee will be comprised of [***] representatives from each of Intellia and Novartis, which (unless otherwise agreed upon between the JSC) will be equal to [***] members of each Party. Subcommittee members may be, but need not be, members of the JSC. Each Subcommittee will meet at least [***] (or more if agreed upon), in alternation at the place designated by Novartis and the place designated by Intellia, in accordance with Section 3.2.4.

Section 3.2 General Rules.

3.2.1 Powers of the Committees; Term. Each of the Joint Steering Committee, the HSC Steering Committee, the CART Steering Committee, and the In Vivo Steering Committee (each, a "Committee") will have solely the roles and responsibilities assigned to it in this Article III and as otherwise expressly set forth in this Agreement. The Committees will have no authority to amend or modify this Agreement or waive compliance with this Agreement, to make decisions that conflict with the terms and conditions of this Agreement, or to create new obligations for a Party not specified in this Agreement. Neither the Committees nor either Party exercising its final decision making pursuant to Section 3.2.5 will have authority to alter, increase, expand, modify, amend, or waive compliance with this Agreement. The Committees will terminate on the expiration of the Research Term.

3.2.2 Committee Membership. Either Party may replace its respective committee representatives at any time upon prior written notice to the other Party. If a Committee member from either Party is unable to attend or participate in a Committee meeting, the Party who designated such representative may designate a substitute representative for the meeting in its sole discretion. The Alliance Managers appointed by Intellia and Novartis pursuant to Section 3.4 will be *ex officio* members of each of the Committees. With the consent of the other Party, each Party may invite up to [***] non-voting employees, consultants, and scientific advisors to attend any Committee meeting to discuss issues arising in the Collaboration; *provided* that any such employees, consultants, or scientific advisors will be subject to restrictions regarding the confidentiality and non-use of Confidential Information no less restrictive than the provisions of Article VIII.

3.2.3 Committee Co-Chairs. Each Party will appoint one of its members in each Committee to co-chair such Committee's meetings (each, a "Co-Chair"). The Co-Chairs will **(a)** ensure the orderly conduct of the Committee's meetings, **(b)** attend each Committee meeting (either in-person, by videoconference or telephonically, unless

otherwise expressly provided herein), and **(c)** prepare and issue written minutes of each meeting within [***] thereafter accurately reflecting the discussions and decisions of such meeting. If the Co-Chair from either Party is unable to attend or participate in a Committee meeting, the Party who designated such Co-Chair may designate a substitute Co-Chair for the meeting in its sole discretion.

3.2.4 Committee Meetings. All meetings will be conducted in English and may be conducted by telephone, videoconference, or in person as determined by the Co-Chairs, as appropriate; *provided* that not less than [***] prior written notice has been given to the other Party. Either Party may also call a special meeting of a Committee (by videoconference or teleconference) by at least [***] prior written notice to the other Party if such Party reasonably believes that a significant matter must be addressed prior to the next regularly scheduled meeting, and no later than [***] prior to the special meeting, such Party will provide the Committee with materials reasonably adequate to enable such Committee to make an informed decision.

3.2.5 Decision Making. Other than as set forth herein, in order to make any decision required of it hereunder, a Committee must have present (in person, by videoconference or telephonically) at least the Co-Chair of each Party (or his/her designee for such meeting). The Parties will endeavor to make decisions where required of a Committee by consensus of the Co-Chairs. If a dispute or failure to agree arises in a Subcommittee that cannot be promptly resolved, the Co-Chairs of any Subcommittee may cause such dispute or failure to agree to be referred to the Joint Steering Committee for resolution. If a dispute or failure to agree arises which cannot be promptly resolved within the Joint Steering Committee, then the matter will be referred to the Senior Officers of the Parties for discussion. The Senior Officers will attempt in good faith to resolve such dispute or failure to agree by unanimous consent. If the Senior Officers cannot resolve such dispute or failure to agree within [***] days of the matter being referred to them, then the resolution and/or course of conduct will be determined as follows:

[***]

Section 3.3 Day-to-Day Decision-Making Authority.

Each Party will have day-to-day decision-making authority with respect to the research activities assigned to it in any Research Plan.

Section 3.4 Alliance Managers.

Each of Intellia and Novartis will appoint a senior representative who possesses a general understanding of research matters to act as its alliance manager for the Collaboration (each, an "Alliance Manager"). Each Party may replace its respective Alliance Manager at any time upon written notice to the other in accordance with this Agreement. Any Alliance Manager may designate a substitute to temporarily perform the functions of that Alliance Manager. Each Alliance Manager will be charged with creating and maintaining a collaborative work environment within and among the Committees. Each Alliance Manager will also be responsible for **(a)** providing a single point of communication and facilitating the flow of information; **(b)** ensuring that the governance procedures and the rules set forth herein are complied with; **(c)** identifying and raising disputes to the relevant Committee for discussion in a timely manner; and **(d)** planning and coordinating internal and external communications in accordance with the terms of this Agreement. The Alliance Managers will be entitled to attend all Committee meetings. Each Alliance Manager may bring to the attention of the Committees any matter that the Alliance Manager reasonably believes requires the attention of the relevant Committees.

Section 3.5 Cost of Governance.

The costs incurred by each Party in connection with its participation at any meetings under this Article III will be borne solely by such Party.

Section 3.6 Development.

3.6.1 Development Generally. After the Research Term and subject to Sections 3.6.2, 5.4.1(a) and (b), 5.4.2 and 5.4.3, Novartis will be solely responsible for conducting, at its sole expense, the Development of its Products as it determines appropriate in its sole discretion.

3.6.2 Regulatory.

(a) [***].

(b) [***].

(c) [***].

(d) Novartis will have the right to disclose the existence of, and the results from, any clinical trials for any Product, conducted under this Agreement in accordance with its standard policies.

Section 3.7 Manufacturing.

3.7.1 Manufacturing Generally. [***]

3.7.2 Manufacturing Know-How and Assistance.

(a) [***]

[***]

Section 3.8 Commercialization.

3.8.1 Commercialization Generally. [***]

[***]

3.8.3 Pharmacovigilance. To the extent required by Applicable Law, within [***], the Parties will agree upon and implement a procedure for the mutual exchange of adverse event reports and safety information associated with the Product. Details of the

operating procedure relating to the adverse event reports and safety information exchange will be the subject of a mutually-agreed written pharmacovigilance agreement between the Parties which will be entered into within such [***] period.

Section 3.9 Intellia HSC Products.

Intellia will be solely responsible for **(a)** all Development of the Intellia HSC Products, **(b)** all regulatory plans and strategies for the Intellia HSC Products, and all Regulatory Filings and all Regulatory Approvals for the Intellia HSC Products to be filed, obtained and maintained throughout the world in the name of Intellia or its Affiliates or sublicensees, **(c)** all manufacture and supply for the Intellia HSC Products, and **(d)** all aspects of Commercialization of the Intellia HSC Products. [***]. Intellia will have the right to disclose the existence of, and the results from, any clinical trials for any Intellia HSC Product, conducted under this Agreement in accordance with its standard policies.

Section 3.10 Debarment.

In performing its obligations under this Agreement, neither Party nor its Affiliates will employ or use any person that has been debarred under Section 306(a) or 306(b) of the U.S. Federal Food, Drug and Cosmetic Act.

ARTICLE IV
RESTRICTIVE COVENANTS

Section 4.1 HSC.

4.1.1 During the Research Term. During the Research Term and except as expressly contemplated by this Agreement [***], the Parties and their Affiliates will not **(a)** engage in any research, Development, or Commercialization activities in the HSC Field [***] **(b)** grant to any Third Party any assignment, license, or other right to Practice Intellia Intellectual Property, Novartis HSC Background Intellectual Property, Novartis Other Background Intellectual Property or Collaboration Intellectual Property in the HSC Field [***].

4.1.2 After the Research Term.

(a) Following the Research Term and during the Agreement Term [***], Intellia and its Affiliates will not (directly or indirectly), **(i)** for themselves or on behalf of or in collaboration with any Third Party, engage in any research, Development, or Commercialization activities in the HSC Field with respect to **(1)** such Novartis Selected HSC Product, or **(2)** the Novartis Selected HSC Target that such Novartis Selected HSC Product is directed toward;

or **(ii)** grant to any Third Party any assignment, license, or other right to Practice Intellia Intellectual Property or Collaboration Intellectual Property in the HSC Field with respect to **(1)** such Novartis Selected HSC Product, or **(2)** the Novartis Selected HSC Target that such Novartis Selected HSC Product is directed toward.

(b) Following the Research Term and during the Agreement Term [***], Novartis and its Affiliates will not (directly or indirectly), **(i)** for themselves or on behalf of or in collaboration with any Third Party, engage in any research, Development, or Commercialization activities in the HSC Field with respect to (**1**) such Intellia HSC Product, or (**2**) the Intellia Selected HSC Target that such Intellia HSC Product is directed toward; or **(ii)** grant to any Third Party any assignment, license, or other right to Practice the Novartis HSC Background Intellectual Property, Novartis Other Background Intellectual Property or Collaboration Intellectual Property in the HSC Field with respect to (**1**) such Intellia HSC Product, or (**2**) the Intellia Selected HSC Target that such Intellia HSC Product is directed toward.

(c) Following the Research Term and during the Agreement Term [***], Intellia and its Affiliates will not (directly or indirectly), **(i)** for themselves or on behalf of or in collaboration with any Third Party, engage in any research, Development, or Commercialization activities in the HSC Field with respect to such Additional Selected HSC Product; or **(ii)** grant to any Third Party any assignment, license, or other right to Practice Collaboration Product Intellectual Property in the HSC Field with respect to such Additional Selected HSC Product.

(d) [***].

(e) [***].

Section 4.2 CART.

4.2.1 During the Research Term. During the Research Term and except as expressly contemplated by this Agreement [***], the Parties and their Affiliates will not **(a)** engage in any research, Development, or Commercialization activities in the CART Field [***], or **(b)** grant to any Third Party any assignment, license, or other right to Practice Intellia Intellectual Property, Novartis HSC Background Intellectual Property, Novartis Other Background Intellectual Property or Collaboration Intellectual Property in the CART Field. [***].

4.2.2 After the Research Term. Following the Research Term and during the Agreement Term [***], Intellia and its Affiliates will not (directly or indirectly), **(i)** for themselves or on behalf of or in collaboration with any Third Party, engage in any research, Development, or Commercialization activities in the CART Field [***]; or **(ii)** grant to any Third Party any assignment, license, or other right to Practice Intellia Intellectual Property or Collaboration Intellectual Property in the CART Field with respect to **(1)** such Advanced CART Product, or **(2)** the CART Therapeutic Target that such Advanced CART Product is directed toward.

4.2.3 [***]

Section 4.3 In Vivo.

[***]

Section 4.4 Permitted Third Party Arrangements.

Nothing in this Article IV will prohibit either Party from obtaining licenses, assignments, or other rights to Intellectual Property Rights from Third Parties, to the extent such Party deems that such Intellectual Property Rights are necessary or useful to the exercise of its rights or performance of its obligations under this Agreement [***].

ARTICLE V
INTELLECTUAL PROPERTY

Section 5.1 Limited Grants for Research Programs.

5.1.1 License Grant by Novartis. Novartis hereby grants to Intellia a worldwide, non-exclusive license to Practice the Novartis HSC Background Intellectual Property and Novartis Other Background Intellectual Property solely to the extent necessary for Intellia and its Affiliates to perform the activities assigned to them in the Collaboration.

5.1.2 License Grant by Intellia. Intellia hereby grants to Novartis and its Affiliates a worldwide, non-exclusive license to Practice the Intellia Intellectual Property solely to the extent necessary for Novartis and its Affiliates to perform the activities assigned to them in the Collaboration [***].

5.1.3 Sublicensing Research Program Activities. Subject to the provisions of Section 2.6, each of the Parties will have the right to grant a sublicense to the rights set forth in this Section 5.1 to Third Party vendors, service providers, and collaborators, solely for Practice in connection with goods or services provided to or on behalf of such Party for the Collaboration as specified in the HSC Research Plan, CART Research Plan, and In Vivo Research Plan.

5.1.4 Term of Research License. The licenses contemplated by Section 5.1.1, Section 5.1.2 and Sections 5.3.1(a)(i), 5.3.2(a)(i), 5.3.2(a) and 5.3.3 (a) will automatically terminate on the expiration of the Research Term.

Section 5.2 Collaboration Intellectual Property.

5.2.1 Generally. Notwithstanding inventorship, **(a)** Collaboration Product Intellectual Property will be jointly owned by the Parties; and **(b)** Collaboration Platform Intellectual Property is hereby assigned to and solely owned by Intellia.

5.2.2 Rights to Collaboration Intellectual Property. Except as provided in Article IV and the exclusive rights set forth in Section 5.4, both Parties and their Affiliates may Practice and grant licenses to Collaboration Product Intellectual Property for all purposes worldwide without the consent of or any accounting to the other Party (other than payments contemplated by Article VII).

5.2.3 Prosecution and Maintenance of Collaboration Intellectual Property Patent Rights.

(a) [***].

(b) Each Party will cooperate with the other with respect to such activities involving the Collaboration Intellectual Property, including the execution of all such documents and instruments and the performance of such acts (and causing its relevant employees to execute such documents and instruments and to perform such acts) as may be reasonably necessary in order to permit the other Party to continue any preparation, filing, prosecution, or maintenance of Patent Rights claiming the Collaboration Intellectual Property. The prosecuting Party will keep the other Party reasonably informed of all material matters relating to the preparation, filing, prosecution and maintenance of, and any post-grant proceedings on [***] the Patent Rights within the Collaboration Product Intellectual Property and [***] the Patent Rights within the Collaboration Platform Intellectual Property (including providing such other Party with copies of all material correspondence with the applicable patent offices) and will reasonably consider such other Party's comments relating to prosecution and maintenance decisions, or defenses or responses to any post-grant proceedings.

Upon either Party's request and where permitted by Applicable Law, the other Party will assist the requesting Party to obtain patent term extensions or supplemental protection certificates or their equivalents in any country ("Extensions") for Patent Rights included in the Collaboration Intellectual Property. Each Party will promptly notify and provide the other Party with copies of any allegations of alleged lack of patentability, patent invalidity, unenforceability or non-infringement, including any such allegation 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") of any Patent Rights included in the Collaboration Intellectual Property. Such notification and copies will be provided to such other Party within [***] after Novartis or Intellia, as applicable, receives such certification.

(c) If a Party (a "Disclaiming Party") elects not to file applications for, or to cease prosecution and/or maintenance of, or not to continue to pay the expenses of prosecution and/or maintenance of, any Patent Rights included in the Collaboration Intellectual Property for which it is primarily responsible pursuant to this Section 5.2.3, the Disclaiming Party will provide such notice to the other Party at least [***] prior to any filing or payment due date (or any other due date that requires action) in connection with such Patent Rights. In such event, the Disclaiming Party will permit the other Party, at its sole discretion and expense, to file or to continue prosecution or maintenance of such Patent Rights.

5.2.4 Enforcement or Defense of Collaboration Intellectual Property Patent Rights.

(a) In the event either Party becomes aware of any actual or suspected infringement of, or a claim of invalidity, lack of patentability, unenforceability or non-infringement against, the Patent Rights claiming the Collaboration Intellectual Property (any of which, a "Collaboration Patent Rights Challenge"), such Party shall provide prompt written notice thereof to the other Party; *provided* that, if the Party becomes aware of a Collaboration Patent Rights Challenge based on a notification (which is not a Paragraph IV Certification) from a Third-Party, then the Party receiving such notification will provide copies of such notification to the other Party no later than [***] after Novartis or Intellia, as applicable, receives such notification.

(b) [***]. The Party bringing the relevant suit (the "Enforcing Party") shall keep the other Party reasonably informed of all developments in the prosecution or settlement of such suit. [***]. Such other Party will provide the Enforcing Party with reasonable assistance in connection with its suit, at the Enforcing Party's expense, including by executing reasonably appropriate documents, cooperating in discovery, and joining as a party to the suit if required, in connection with any litigation commenced pursuant to this Section 5.2.4.

(c) Any recoveries resulting from such a suit will be first applied against payment of each Party's costs and expenses in connection therewith [***].

Section 5.3 Intellia Intellectual Property; Novartis HSC Background Intellectual Property; Novartis Other Background Intellectual Property.

5.3.1 Novartis Selected HSC Products; Intellia HSC Products.

(a) Novartis Selected HSC Products. Intellia hereby grants to Novartis and its Affiliates a worldwide license to Practice the Intellia Intellectual Property and Collaboration Platform Intellectual Property **(i)** during the Research

Term, to research and Develop HSC Products (other than Intellia HSC Products directed at Intellia Selected HSC Targets) under the HSC Research Plan; and **(ii)** during and after the Research Term, to research, Develop, and Commercialize any Novartis Selected HSC Products and Additional Selected HSC Products in the HSC Field. [***]. Subject to Section 5.3.4 and Section 2.6, Novartis and its Affiliates will have the right to sublicense the rights [***] to Third Party vendors, service providers, and collaborators, solely for Practice in connection with the research, Development, and Commercialization of such Novartis Selected HSC Products and Additional Selected HSC Products in the HSC Field.

(b) Intellia HSC Products. Novartis hereby grants to Intellia and its Affiliates a worldwide, non-exclusive license to Practice the Novartis HSC Background Intellectual Property **(i)** during the Research Term, to research and Develop HSC Products; and **(ii)** during and after the Research Term, to research, Develop, and Commercialize any Intellia HSC Products in the HSC Field (the "Novartis HSC Background IP License"). Subject to Section 5.3.4 and Section 2.6, Intellia and its Affiliates will have the right to sublicense the Novartis HSC Background IP License [***] to Third Party vendors, service providers, and collaborators, solely for Practice in connection with the research, Development, and Commercialization of such Intellia HSC Products.

5.3.2 CART Products. Intellia hereby grants to Novartis and its Affiliates a worldwide license to Practice the Intellia Intellectual Property and Collaboration Platform Intellectual Property **(a)** during the Research Term, to research and Develop any CART Products under the CART Research Plan; and **(b)** during and after the Research Term, to research, Develop, and Commercialize any CART Products in the CART Field. [***]. Subject to Section 5.3.4 and Section 2.6, Novartis and its Affiliates will have the right to sublicense such rights [***] to Third Party vendors, service providers, and collaborators, solely for Practice in connection with the research, Development, and Commercialization of such CART Products.

5.3.3 In Vivo Products. Intellia hereby grants to Novartis and its Affiliates a worldwide, non-exclusive license to Practice the Intellia Intellectual Property and Collaboration Platform Intellectual Property **(a)** following [***] of the Effective Date and for the remainder of the Research Term, to research and Develop In Vivo Products under any In Vivo Research Plans; and **(b)** after the Research Term, to research, Develop, and Commercialize any Novartis Selected In Vivo Products in the In Vivo Field. Subject to Section 5.3.4 and Section 2.6, Novartis and its Affiliates will have the right to sublicense such rights through multiple tiers to Third Party vendors, service providers, and collaborators, solely for Practice in connection with the research, Development, and Commercialization of such Novartis Selected In Vivo Products.

5.3.4 Sublicensing Rights. Novartis and its Affiliates may grant sublicenses of the license granted in Section 5.3.1(a), Section 5.3.2, and Section 5.3.3, and Intellia and its Affiliates may grant sublicenses of the license granted in Section 5.3.1(b), *provided* that **(a)** such sublicense **(i)** is in writing, **(ii)** is subject and subordinate to, and consistent with, the terms and conditions of this Agreement, and **(iii)** requires the applicable sublicensee to comply with all applicable terms of this Agreement [***]; **(b)** with respect to Novartis or any of its Affiliates as the sublicensing Party to the extent required by the Key License Agreements as in effect on the Effective Date or the agreements for any Included Intellia New In-Licensed Intellectual Property, Novartis promptly notifies Intellia of the grant of each sublicense and provides Intellia a copy of the final executed sublicense agreement, redacted for information not pertinent to this Agreement to the extent that such redactions do not reasonably impair Intellia's ability to ensure compliance with this Agreement, the Key License Agreements or agreements for any Included Intellia New In-Licensed Intellectual Property, as applicable, **(c)** Novartis or Intellia, as applicable, shall be responsible for the failure by its sublicensees to comply with, and Novartis or Intellia, as applicable, guarantees the compliance by each of its sublicensees with, all relevant restrictions, limitations and obligations in this Agreement, and [***].

5.3.5 Maintenance & Compliance of License Agreements.

(a) With respect to the Intellectual Property Rights that are licensed to Intellia under any license agreement comprising the Key License Agreements, **(i)** Intellia will use Commercially Reasonable Efforts to maintain the relevant license agreement in full force and effect; **(ii)** Intellia will provide prompt written notice to Novartis if it becomes aware of or receives any notice that Intellia or its licensor is in breach or default of any such license agreement, **(iii)** Intellia will use Commercially Reasonable Efforts to cure such breach or default [***], and **(iv)** Intellia will not cause the Key License Agreements to be amended or modified in any way that would reasonably be expected to have a material adverse effect on Novartis' rights under this Agreement [***]; **(v)** if Intellia becomes aware that any of its licensors has terminated or receives notice that any of its licensors intend to terminate any such license agreement or otherwise materially restrict or limit Intellia's and Novartis' rights to the relevant Intellectual Property Rights, **(A)** Intellia will provide prompt written notice to Novartis [***].

(b) The licenses granted to Novartis and its Affiliates under Sections 5.3.1(a), 5.3.2 and 5.3.3 will be subject to Novartis' and its Affiliates', and their sublicensees' compliance as of the Effective Date with the terms of the Key License Agreements [***] and the terms of the agreements for any Included Intellia New In-Licensed Intellectual Property, as applicable.

5.3.6 Novartis Other Background Intellectual Property. Novartis hereby grants to Intellia and its Affiliates a worldwide, non-exclusive, fully paid and royalty-free license to Practice the Novartis Other Background Intellectual Property to research, Develop, and Commercialize Intellia HSC Products and therapeutic, prophylactic, and/or palliative CRISPR-based *in vivo* products by or on behalf of Intellia or its Affiliates. Subject to Section 5.3.4 and Section 2.6, Intellia and its Affiliates will have the right to sublicense the license granted under this Section 5.3.6 [***] to Third Party vendors, service providers, and collaborators, solely for Practice in connection with the research,

Development, and Commercialization of such Intellia HSC Products and therapeutic, prophylactic, and/or palliative CRISPR-based *in vivo* products with (*e.g.*, collaborations) or on behalf of Intellia or its Affiliates. Novartis will have the right to terminate rights [***] upon written notice to Intellia in the event that Intellia or any of its Affiliates [***] (an "Intellia Other Patent Challenge"). In the event Intellia or any of its Affiliates intends to assert an Intellia Other Patent Challenge [***] not less than [***] days prior to making any such assertion, Intellia shall provide to Novartis a complete written disclosure of each basis known to Intellia for such assertion. Novartis must exercise its right to terminate Intellia's rights [***] within [***] days of the Novartis' receipt of service of process (or its equivalent) in the relevant administrative or legal proceeding, [***].

Section 5.4 Exclusivity.

5.4.1 HSC.

(a) [***].

(b) [***]

5.4.2 CART Program. [***].

5.4.3 In Vivo Program. [***].

Section 5.5 Licenses in Bankruptcy.

All licenses granted under or pursuant to this Agreement are intend to be licenses of intellectual property as contemplated by Section 365(n) of the United States Bankruptcy Code and equivalent or corresponding provisions of Applicable Laws of other jurisdictions. Each licensee may retain and may fully exercise all of its protections, rights, and elections under all Applicable Laws.

Section 5.6 No Implied Licenses.

The licenses set forth in this Article V are limited in scope to those expressly set forth in this Agreement, and no implied license is intended to be created by this Agreement.

ARTICLE VI
[***]

[***]

ARTICLE VII
PAYMENTS

Section 7.1 Technology Access Fee; Annual Access Fee; Equity.

7.1.1 Upfront Technology Access Fee Payment. Novartis will make a one time payment of USD$10,000,000 within [***] days after receipt of an Invoice for the same, which will be issued on or after [***].

7.1.2 Annual Access Fee. [***] Novartis will make annual payments of USD$5,000,000 each within [***] days of receipt of an Invoice for the same, with the [***] payment to be paid by Novartis to Intellia no later than [***] (provided Novartis has received an Invoice therefor at least [***] days prior to such date) and the subsequent annual payments to be invoiced on the [***]. In no events will payments pursuant to this Section 7.1.2 exceed USD$20,000,000 in the aggregate.

7.1.3 Additional Selected HSC Targets Fee. For each Additional Selected HSC Target, Novartis will make a payment of [***], which will be paid within [***] days of receipt of an Invoice for the same, to be issued upon receipt of Novartis' notice to Intellia [***].

7.1.4 Equity Investment. Novartis will have the right to make the investments set forth in the Equity Agreements.

Section 7.2 Research Funding Payments.

7.2.1 HSC Program; CART Program.

(a) [***], Novartis will make to Intellia research funding reimbursements payments ("Research Funding Payments") in the amount of [***] in the aggregate per [***] period [***] and, unless agreed upon by the Parties in writing, not to exceed USD$20,000,000 in the aggregate [***]. Specifically, Novartis will make quarterly Research Funding Payments in the amount of [***] within [***] days of Novartis' receipt of an Invoice for the same issued by Intellia upon the [***] day of the applicable such [***] period.

[***]

7.2.2 In Vivo Program. If pursuant to Section 2.4.3, if the Parties agree that Intellia will be responsible for activities under an In Vivo Research Plan, then for all such activities performed by or behalf of Intellia, Novartis will reimburse Intellia at the FTE Rate consistent with the In Vivo Budget included in any applicable In Vivo Research Plans ("In Vivo Research Funding Payments"). Novartis will make [***] In Vivo Research Funding Payments [***].

7.2.3 General. [***]

Section 7.3 Development and Approval Milestones.

7.3.1 Generally. The fees set forth in the table below (collectively, "Milestone Payments") will accrue to Intellia upon the achievement by Novartis, its Affiliates, or any of their sublicensees of the corresponding events (the "Milestones") with respect to each Product per Target that achieves such Milestone; *provided, however*, that:

(a) HSC Products. On a Novartis Selected HSC Target-by- Novartis Selected HSC Target basis and an Additional Selected HSC Target-by-Additional Selected HSC Target basis, as applicable, Milestones Payments shall be as follows:

[***]

(b) CART Products. On a CART Therapeutic Target-by-CART Therapeutic Target basis, Milestones Payments shall be as follows:

[***]

(c) In Vivo Products. On a Novartis Selected In Vivo Target -by- Novartis Selected In Vivo Target basis, Milestones Payments shall be as follows:

[***]

(e) [***]

(f) Example of Milestones Payment. An example of the Milestone payments and the provisions of clauses (a) through (e), above, is set forth as *Exhibit D*.

[Table Follows]

#	Milestone	Milestone Payment
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
	[***]	

7.3.2 Milestone Payments. Novartis will provide Intellia with written notice within [***] days after Novartis determines or is informed that the relevant Milestone has been achieved. Novartis will pay the corresponding Milestone Payment within [***] days after receipt of an Invoice for the same.

7.3.3 Skipped Milestones. [***]

Section 7.4 Royalties on Products.

7.4.1 Royalties Generally. Novartis or its Affiliate will make royalty payments to Intellia [***] on a Product by Product basis at the following marginal royalty rates ("Royalties"):

[***]	Marginal Royalty Rate
[***]	[***]
[***]	[***]
[***]	[***]

7.4.2 Royalty Duration. Royalties will be payable on a Product by Product and country by country basis during the Royalty Term. Thereafter, Novartis', its Affiliates' and their sublicensees' rights to such Product in such country will be Royalty-free.

7.4.3 Payment of Royalties. Within [***] days after the end of each Calendar Quarter during the Royalty Term, Novartis will provide Intellia with a report stating the Net Sales of Products sold by Novartis or its Affiliates [***] during that Calendar Quarter, together with the calculation of the Royalties due to Intellia. Royalty payments will be made by Novartis or its Affiliate to a bank account indicated by Intellia within [***] days after the date of receipt by Novartis of an Invoice for the indicated amount.

7.4.4 Loss of Market Exclusivity. If a Loss of Market Exclusivity for any Product occurs in any country, then for the remaining period of the Royalty Term following such Loss of Market Exclusivity, the Net Sales for such country [***] for the purpose of the calculation of Royalties due under Section 7.4.1 will be reduced by [***].

7.4.5 Know How Only Royalties. If, during the Royalty Term, the relevant Product is not covered by a Valid Claim in the applicable country, then for so long as there is no Valid Claim in such country during the Royalty Term, the Net Sales for such country [***] for the purpose of the calculation of Royalties due under Section 7.4.1 will be reduced by [***].

7.4.6 Minimum Royalties. Notwithstanding any multiple reductions that may be taken pursuant to this Article VII [***], in no event will the Royalty rates under this Agreement fall below, as applicable, the Royalty Rates of the Revised Royalty Floor set forth in Section 7.6.2(b), or [***] of the Royalty rates set forth in Section 7.4.1 in any Calendar Quarter pursuant to this Section 7.4.6. [***].

7.4.7 Sample Computations. Sample Royalty computations for Section 7.4 are set forth on *Exhibit E*.

7.4.8 Payments on Novartis HSC Background IP License.

(a) [***].

(b) [***].

(c) [***].

(d) [***].

(e) [***].

(f) [***].

Section 7.5 Sales Milestones on Products.

Novartis will make each of the following [***] payments (each, a "Sales Milestone Payment") when [***] (the "Sales Milestones"):

[***]	Sales Milestone Payment
[***]	[***]
[***]	[***]
[***]	[***]

Novartis will provide written notice to Intellia within [***] days of its determination that a Sales Milestone as contemplated by this Section 7.5 has been achieved, and will make the corresponding Sales Milestone Payment within [***] days after the date of receipt by Novartis of an Invoice for the indicated amount.

Section 7.6 Third Party Royalties.

7.6.1 Caribou. Novartis will reimburse Intellia for [***]; *provided, however*, that Novartis will not be responsible for [***]. All such reimbursement payments will be made within [***] days of receipt of an Invoice for the same [***].

7.6.2 Third Party Obligations.

(a) Except as contemplated by Section 7.6.1, Intellia will remain responsible for the payment of royalty, milestone and other payment obligations, if any, due to Third Parties under any other (*i.e.*, not identified in Section 7.6.1) Intellia Intellectual Property that has been licensed to Intellia as of the Effective Date. After the Effective Date, if Intellia in-licenses Intellectual Property Rights of a Third Party that cover the Intellia Platform or improvements thereto ("Intellia New In-Licensed Intellectual Property"), then Intellia shall make such Intellia New In-Licensed Intellectual Property available to be included in the licenses to Novartis under this Agreement by notifying Novartis of the Intellia New In-Licensed Intellectual Property and related agreement, including any anticipated financial obligations that may arise if Novartis were to elect to take a sublicense to such Intellectual Property Rights. Within [***] days of receiving notice of any Intellia New In-Licensed Intellectual Property, Novartis may elect to add such Intellectual Property Rights to the Intellia Intellectual Property ("Included Intellia New In-Licensed Intellectual Property") [***] If Novartis fails or declines to make the election specified in this section within [***] days of receiving the notice from Intellia, such declined Intellectual Property Rights shall not be included as Intellia Intellectual Property [***] ("Excluded Intellia New In-Licensed Intellectual Property") [***]. Further, Excluded Intellia New In-Licensed Intellectual Property shall include any Intellectual Property licensed or acquired by Intellia from a Third Party after the Effective Date that is not Intellia New In-Licensed Intellectual Property.

(b) If Novartis determines that licenses or other rights to Intellectual Property Rights of a Third Party are required to Practice the Intellia Intellectual Property (other than those already in-licensed by Intellia and available to Novartis pursuant to the terms of Section 7.6.2(a) above), Novartis will have the right to negotiate and acquire such rights through a license and will be responsible for all amounts to be paid to such Third Party; *provided*, *however*, that [***].

(c) After the Effective Date, if Novartis in-licenses Intellectual Property Rights of a Third Party that cover the Intellia Platform or improvements thereto ("Novartis New In-Licensed Platform Intellectual Property"), then Novartis shall make such Novartis New In-Licensed Platform Intellectual Property available to be included in the license granted to Intellia under Section 5.3.6 by notifying Intellia of the Novartis New In-Licensed Platform Intellectual Property and related agreement, including any anticipated financial obligations that may arise if Intellia were to elect to take a sublicense to such Intellectual Property. Within [***] days of receiving notice of any Novartis New In-Licensed Platform Intellectual Property, Intellia may elect to add such Intellectual Property Rights to the Novartis Other Background Intellectual Property ("Included Novartis New In-Licensed Platform Intellectual Property") [***]. If Intellia fails or declines to make the election specified in this section within [***] days of receiving the notice from Novartis, such declined Intellectual Property Rights shall not be included as Novartis Other Background Intellectual Property [***] ("Excluded Novartis New In-Licensed Platform Intellectual Property") [***].

Section 7.7 [***]

Section 7.8 Recordkeeping and Reports.

7.8.1 Recordkeeping Generally. Each Party will keep complete, true and accurate books and records in accordance with its Accounting Standards, as applicable, in relation to this Agreement, including, in the case of Novartis, with respect to Net Sales and Royalties, and in the case of Intellia, FTEs rendered pursuant to this Agreement, and Intellia Net Sales. Each Party will keep such books and records for at least [***] following the Calendar Year to which they pertain. Each Party will promptly notify the other in advance of any changes to the Accounting Standards by which its records are maintained, it being understood that each Party may only use internationally recognized accounting principles (*e.g.*, IFRS, US GAAP, *etc.*).

7.8.2 Audit Right. Each Party may, upon written request, cause an internationally-recognized independent accounting firm (the "Auditor"), which is reasonably acceptable to the other Party, to inspect the relevant records of the other Party and its Affiliates to verify the amounts payable by the Parties and the related reports, statements and books of accounts, as applicable, referenced in Section 7.8.1 and 7.6.1. Before beginning its audit, the Auditor will execute an undertaking acceptable to the audited Party by which the Auditor agrees to keep confidential all information reviewed during the audit. The Auditor will have the right to disclose to the Party requesting the audit only its conclusions regarding any payments owed under this Agreement.

7.8.3 Inspection of Books and Records. The audited Party and its Affiliates will make their records available for inspection by the Auditor during regular business hours at such place or places where such records are customarily kept, upon receipt of reasonable advance notice from the Party requesting the audit. The records will be reviewed solely to verify the accuracy of the Parties' financial obligations corresponding to this Agreement. Such inspection right will not be exercised more than once in any Calendar Year and not more than once with respect to records covering any specific period of time. In addition, each Party will only be entitled to audit the books and records of the other Party from the [***] prior to the Calendar Year in which the audit request is made. The Party requesting the audit will hold in strict confidence all information received and all information learned in the course of any audit or inspection, except to the extent necessary to enforce its rights under this Agreement or to the extent required to comply with any Applicable Laws.

7.8.4 Report. The Auditor will provide its audit report and basis for any determination both Parties before it is considered final. If the final result of the inspection reveals an undisputed underpayment or overpayment, then the underpaid or overpaid amount will be settled promptly. If the audited Party disagrees with the findings

of the report, it will provide the other Party and the Auditor with a reasonably detailed statement of the grounds upon which it disputes such findings in the audit report and the Auditor will undertake to complete such further determination within 30 days after the dispute notice is provided, which determination will be limited to the disputed matters. The Parties will use reasonable efforts, through the participation of finance representatives of both companies, to resolve any dispute arising in relation to the audit by good faith discussion.

7.8.5 Payment for Audit. The Party requesting the audit will pay for such inspections, as well as its expenses associated with enforcing its rights with respect to any payments hereunder; *provided* that **(a)** if an underpayment of royalties of more than [***]% of the total payments due by Novartis hereunder for the applicable Calendar Year is discovered and is due to an error or omission of Novartis, the fees and expenses charged by the Auditor will be paid by Novartis; and **(b)** if an overpayment by Novartis of more than [***]% of the total payments due hereunder for the applicable Calendar Year is discovered and is due to an error or omission of Intellia, the fees and expenses charged by the Auditor will be paid by Intellia.

7.8.6 Commercially Reasonable Efforts Report. Starting on [***] and on an [***] basis thereafter during the Agreement Term, Novartis will provide Intellia a report of each Novartis Selected HSC Product, Additional Selected HSC Product, Advanced CART Product, and In Vivo Product that is then the subject of ongoing research, Development, and Commercialization activities [***]. Each such report shall detail the current status of Development of each such Product, and the anticipated date of the next milestone to be achieved by such Product.

Section 7.9 Payments; Interest.

All payments will be made in US Dollars by wire transfer in immediately available funds to a bank and account designated in writing by Intellia for payments to be made by Novartis hereunder, or designated in writing by Novartis for payments, if any, to be made by Intellia pursuant to Section 7.4.8 and 7.6.2(c). Any payments which fall due

on a date that is not a Business Day will be due on the next date that is a Business Day. Any payments or portions thereof due hereunder which are not paid when due shall bear simple interest equal to the lesser of **(a)** one-month Euribor plus 200 basis points per annum, or **(b)** the maximum rate permitted by Applicable Law, calculated on the number of days such payment is delinquent.

Section 7.10 Projections.

Intellia and Novartis acknowledge that nothing in this Agreement will be construed as representing an estimate or projection of anticipated sales of any Product, and that the Milestones and Net Sales levels set forth above or elsewhere in this Agreement or that have otherwise been discussed by the Parties are merely intended to define the payments and royalty obligations to Intellia if such Milestones or Net Sales levels are achieved. *NEITHER Intellia NOR Novartis MAKES ANY REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, THAT IT WILL BE ABLE TO SUCCESSFULLY RESEARCH, DEVELOP OR COMMERCIALIZE ANY PRODUCT OR SERVICE OR, IF COMMERCIALIZED, THAT ANY PARTICULAR NET SALES LEVEL OF SUCH PRODUCT OR SERVICE WILL BE ACHIEVED.*

ARTICLE VIII
CONFIDENTIALITY

Section 8.1 Undertaking.

Subject to the other provisions of this Article VIII, all Confidential Information disclosed by a Party or its Affiliates in connection with the Collaboration or under this Agreement will be maintained in confidence and otherwise safeguarded by the recipient Party. The recipient Party may only use such Confidential Information for the purposes of this Agreement and pursuant to the rights granted to the recipient Party under this Agreement. Subject to the other provisions of this Article VIII, each Party will hold as confidential such Confidential Information of the other Party or its Affiliates in the same manner and with the same protection as such recipient Party maintains its own confidential information (but in no event will it exercise less than reasonable care with

respect to such Confidential Information). Subject to the other provisions of this Article VIII, a recipient Party may only disclose Confidential Information of the other Party to employees, agents, contractors, consultants, and advisers of the recipient Party and its Affiliates, licensees and sublicensees and to Third Parties to the extent reasonably necessary for the purposes of, and for those matters undertaken pursuant to, this Agreement; *provided* that such Persons are bound to maintain the confidentiality of the Confidential Information in a manner consistent with the confidentiality provisions of this Agreement. The Parties acknowledge that Confidential Information has been exchanged between the Parties prior to the Effective Date pursuant to the Confidentiality Agreement. The Parties agree that as of the Effective Date the Confidentiality Agreement is hereby terminated without further force and effect and is superseded by this Article VIII, and all obligations between the Parties relating to all such Confidential Information exchanged before the Effective Date will be governed by this Article VIII.

Section 8.2 Exceptions to Confidentiality.

The obligations under this Article VIII will not apply to any information to the extent the recipient Party can demonstrate by competent evidence that such information:

(a) is (at the time of disclosure) or becomes (after the time of disclosure) known to the public or part of the public domain through no breach of this Agreement by the recipient Party or its Affiliates;

(b) was known to, or was otherwise in the possession of, the recipient Party or its Affiliates prior to the time of disclosure by the disclosing Party or any of its Affiliates;

(c) is disclosed to the recipient Party or an Affiliate on a non-confidential basis by a Third Party who is entitled to disclose it without breaching any confidentiality obligation to the disclosing Party or any of its Affiliates; or

(d) is independently developed by or on behalf of the recipient Party or its Affiliates, as evidenced by its written records, without reference to the Confidential Information disclosed by the disclosing Party or its Affiliates under this Agreement.

Specific aspects or details of Confidential Information will not be deemed to be within the public domain or in the possession of the recipient Party merely because the Confidential Information is embraced by more general information in the public domain or in the possession of the recipient Party. Further, any combination of Confidential Information will not be considered in the public domain or in the possession of the recipient Party merely because individual elements of such Confidential Information are in the public domain or in the possession of the recipient Party unless the combination and its principles are in the public domain or in the possession of the recipient Party.

Section 8.3 Authorized Disclosures.

In addition to disclosures allowed under Sections 8.1 and 8.2, each Party may disclose Confidential Information belonging to the other Party or its Affiliates to the extent such disclosure is necessary in the following instances: **(a)** filing or prosecuting Patent Rights; **(b)** in connection with seeking for or obtaining Regulatory Approval; **(c)** prosecuting or defending litigation as permitted by this Agreement; **(d)** complying with applicable court orders or governmental regulations; **(e)** to any potential or actual investor, lender, financing partner, acquirer, or merger partner, or **(f)** to the extent otherwise necessary or appropriate in connection with exercising the license and other rights granted to it hereunder. If the recipient Party is required to disclose Confidential Information of the disclosing Party by Applicable Law or in connection with bona fide legal process, such disclosure will not be a breach of this Agreement; *provided* that the recipient Party **(i)** informs the disclosing Party as soon as reasonably practicable of the required disclosure; **(ii)** limits the disclosure to the required purpose; and **(iii)** at the disclosing Party's request and expense, assists in an attempt to object to or limit the required disclosure.

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Section 8.4 Publicity.

8.4.1 The Parties will agree on a mutually acceptable press release to be issued within [***] following the execution of this Agreement.

8.4.2 Subject to Section 8.4.1, no public announcement concerning the existence or the terms of this Agreement or concerning the transactions described herein will be made, either directly or indirectly, by a Party or its Affiliates without first obtaining the written consent of the other Party; *provided* that either Party may disclose such information as may be required by Applicable Law, including those incident to the listing of securities on a stock exchange, without the consent of the other Party; *provided further* that the Party disclosing such information will **(a)** only disclose such information as is required by such Applicable Law; **(b)** provide reasonable advance notice to the other Party of the intended disclosure and the content of that disclosure; and **(c)** seek a confidential treatment order (or a protective or limiting order, as applicable) for all provisions of this Agreement that can be reasonably deemed to be trade secrets and will permit the non-disclosing party reasonable advance notice and the opportunity to comment on any such confidential treatment request or protective order request.

Section 8.5 Material Transfer.

[***]

ARTICLE IX
REPRESENTATIONS, WARRANTIES, AND COVENANTS

Section 9.1 Representations and Warranties of Both of the Parties.

Each Party represents and warrants to the other as of the Effective Date that: **(a)** it is a corporation duly organized, validly existing, and in good standing under the Applicable Laws of its jurisdiction of incorporation; **(b)** it has full corporate power and authority to execute, deliver, and perform this Agreement, and has taken all corporate action required by law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by

this Agreement; **(c)** this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, receivership, moratorium, fraudulent transfer, or other Applicable Laws affecting the rights and remedies of creditors generally and by general principles of equity; **(d)** all consents, approvals and authorizations from all governmental authorities or other Third Parties required to be obtained by such Party in connection with this Agreement have been obtained; and **(e)** the execution and delivery of this Agreement and all other instruments and documents required to be executed pursuant to this Agreement, and the consummation of the transactions contemplated hereby do not and will not **(i)** conflict with or result in a breach of any provision of its organizational documents; **(ii)** result in a breach of any agreement to which it is a party; or **(iii)** violate any Applicable Law.

Section 9.2 Representations and Warranties of Intellia.

Intellia represents and warrants to Novartis as of the Effective Date as follows: **(a)** true and correct copies of [***] respectively, as they exist as of the Effective Date have been provided to Novartis (collectively, the "Key License Agreements"); **(b)** [***], are in full force and effect as of the Effective Date, and Intellia has no knowledge of any facts or circumstances that would constitute a breach of any of the Key License Agreements on the part of any of the parties to those agreements; **(c)** Intellia has not granted any Third Party rights that would conflict with Novartis' rights granted hereunder, and there are no agreements or arrangements to which Intellia or any of its Affiliates is a party relating to any Intellectual Property Rights, however arising, Controlled by Intellia that would limit the rights granted to Novartis under this Agreement; **(d)** to Intellia's knowledge, the Patent Applications included in the Intellia Intellectual Property on the Effective Date have been filed and prosecuted in accordance with all Applicable Laws; and **(e)** except as set forth on Schedule 9.2(e), all of Intellia's employees, officers, and consultants have executed agreements or have existing obligations under Applicable Law requiring assignment to Intellia of all inventions made

during the course of and as the result of the Collaboration and obligating such individuals to maintain as confidential Intellia's Confidential Information as well as confidential information of other parties (including Novartis' and Novartis' Affiliates) that such individual may receive in the conduct of the Collaboration.

Section 9.3 Representations and Warranties of Novartis.

Novartis represents and warrants to Intellia as of the Effective Date as follows: **(a)** all of its employees, officers, and consultants have executed agreements or have existing obligations under Applicable Law requiring assignment to Novartis of all inventions made during the course of and as the result of the Collaboration and obligating the individual to maintain as confidential Novartis' Confidential Information as well as confidential information of other parties (including Intellia's) that such individual may receive in the conduct of the Collaboration; **(b)** it has not granted any Third Party rights that would conflict with Intellia's rights granted hereunder, and there are no agreements or arrangements to which Novartis or any of its Affiliates is a party relating to any Intellectual Property Rights, however arising, Controlled by Novartis that would limit the rights granted to Intellia under this Agreement; **(c)** to its knowledge, the Patent Applications included in the Novartis Intellectual Property on the Effective Date have been filed and prosecuted in accordance with all Applicable Laws; and **(d)** [***].

Section 9.4 Covenants.

9.4.1 Compliance with Applicable Law. Each of the Parties will conduct the Collaboration in compliance with all Applicable Laws, including, laws and regulations relating to health, safety and the environment, fair labor practices, anti-bribery, and unlawful discrimination.

9.4.2 Personal Information and Privacy. In the course of the performance of the Collaboration, each of the Parties may acquire the Personal Information (as defined herein) of individuals from various sources and countries. Each of the Parties will, and will cause its Affiliates and agents to, process all Personal Information it acquires under

or in connection with this Agreement in compliance with all applicable data protection laws, including the data protection laws of the European Union, European Economic Area, Switzerland, the United States and various localities therein. Each of the Parties acknowledges that the requirements under such data protection laws may exceed the requirements applicable to Confidential Information set forth in Article VIII. Each of the Parties may, on reasonable prior notice, audit the other Party's compliance with such data protection laws. For this purpose, "Personal Information" means any information that can be used to identify, describe, locate or contact an individual, including **(a)** name or initials; **(b)** home or other physical address; **(c)** telephone number; **(d)** email address or online identifier associated with the individual; **(e)** social security number or other similar government identifier; **(f)** employment, financial or health information; **(g)** information specific to an individual's physical, physiological, mental, economic, racial, political, ethnic, ideological, cultural or social identity; **(h)** photographs; **(i)** dates relating to the individual (except years alone); **(j)** financial account numbers; **(k)** genetic material or information; **(l)** business contact information; and **(m)** any other information relating to an individual that, alone or in combination, with any of the above, can be used to identify an individual. Novartis will anonymize all information related to any Novartis Materials consisting of human biological samples.

9.4.3 No Conflicting Agreements. Each of the Parties covenants that it will not enter into any agreement, arrangement, or undertaking after the Effective Date that would prohibit or restrict its ability to perform its obligations as set forth in this Agreement or materially alter the other Party's rights under this Agreement.

Section 9.5 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 INTELLIA INTELLECTUAL PROPERTY, NOVARTIS BACKGROUND INTELLECTUAL PROPERTY, COLLABORATION INTELLECTUAL PROPERTY,

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

TARGETS, PRODUCTS OR SERVICES, INCLUDING WARRANTIES OF VALIDITY OR ENFORCEABILITY OF ANY PATENT RIGHTS, TITLE, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR USE OR PURPOSE, PERFORMANCE, AND NON-INFRINGEMENT OF ANY THIRD PARTY PATENTS OR OTHER INTELLECTUAL PROPERTY RIGHTS.

ARTICLE X
INDEMNIFICATION

Section 10.1 Indemnification by Intellia.

Intellia will indemnify, defend, and hold Novartis, its Affiliates, and their respective employees, shareholders, officers, and directors, and the successors, heirs and assigns of each of them (the "Novartis Indemnitees"), harmless against any loss, damages, liability or expense, as well as reasonable attorneys' fees and litigation expenses (collectively, a "Loss") incurred by any Novartis Indemnitee in connection with any action, suit, proceeding, claim or demand by a Third Party, including personal injury and product liability matters (a "Third Party Claim"), to the extent that **(a)** such Loss is based on or arises out of the breach by Intellia of any of its covenants, representations, or warranties set forth in this Agreement (but excluding any such Loss that is caused by the negligent, reckless or intentional acts or omissions of Novartis or any other Novartis Indemnitee); or **(b)** such Loss relates to Intellia's, its Affiliates, or its or their licensees' or contractors' actions in connection with the research, Development, manufacture, use or Commercialization of an Intellia Selected Product.

Section 10.2 Indemnification by Novartis.

Novartis will indemnify, defend, and hold Intellia, its Affiliates, and their respective employees, shareholders, officers, and directors and the successors, heirs, and assigns of each of them (the "Intellia Indemnitees"), harmless against any Loss incurred by any Intellia Indemnitee in connection with any Third Party Claim to the extent **(a)** such Loss is based on or arises out of the breach by Novartis of any of its covenants, representations, or warranties set forth in this Agreement (but excluding any such Loss

that is caused by the negligent, reckless or intentional acts or omissions of Intellia or any other Intellia Indemnitee); or **(b)** such Loss relates to Novartis', its Affiliates', or its or their licensees' or contractors' actions in connection with the research, Development, manufacture, use or Commercialization of a Product.

Section 10.3 Claims Procedures.

Each Person entitled to be indemnified by the other Party (an "Indemnified Party") pursuant to Section 10.1 or Section 10.2 will give notice to the other Party (an "Indemnifying Party") promptly after such Indemnified Party has actual knowledge of any threatened or asserted claim as to which indemnity may be sought, and will permit the Indemnifying Party to assume the sole control of the defense of any such claim or any litigation resulting therefrom; *provided, however*:

(a) that counsel for the Indemnifying Party who will conduct the defense of such claim or any litigation resulting therefrom will be approved by the Indemnified Party (whose approval will not unreasonably be withheld) and the Indemnified Party may participate in such defense at the Indemnified Party's expense, unless the Indemnified Party reasonably concludes that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the defense of such action, in each of which cases the Indemnifying Party will pay the reasonable fees and expenses of one law firm serving as counsel for the Indemnified Party, which law firm will be subject to approval, not to be unreasonably withheld, by the Indemnifying Party;

(b) the failure of any Indemnified Party to give notice as provided herein will not relieve the Indemnifying Party of its obligations under this Agreement to the extent that the failure to give notice did not result in harm to the Indemnifying Party or materially compromise the defense of such claim;

(c) no Indemnifying Party, in the defense of any such claim or litigation, will consent to entry of any judgment or enter into any settlement,

except with the approval of each Indemnified Party (which approval will not be unreasonably withheld), except a settlement which imposes only a monetary obligation on the Indemnifying Party and which includes as an unconditional term thereof the giving of a release from all liability in respect to such claim or litigation by the claimant or plaintiff to the Indemnified Party; and

(d) each Indemnified Party will furnish such information or reasonable assistance regarding itself or the claim in question as an Indemnifying Party may reasonably request in writing and will be reasonably required in connection with the defense of such claim and litigation resulting therefrom.

Section 10.4 Mitigation of Loss.

Each Indemnified Party will take and will procure that the other Novartis Indemnitees, where Novartis is the Indemnified Party, and the other Intellia Indemnitees, where Intellia is the Indemnified Party, take all such reasonable steps and action as are necessary or as the Indemnifying Party may reasonably require in order to mitigate any Loss (or potential Loss) under this Article X. Nothing in this Agreement will or will be deemed to relieve any Party of any common law or other duty to mitigate any losses incurred by it.

Section 10.5 Special, Indirect and Other Losses.

Neither Party nor any of its Affiliates will be liable in contract, tort, negligence, breach of statutory duty, or otherwise for any special, indirect, incidental, punitive, or consequential damages or for any economic loss or loss of profits suffered by the other Party, except to the extent such damages are required to be paid to a Third Party as a part of a Loss for which that Party is to provide indemnification under this Article X or for such Party's fraud, gross negligence or intentional misconduct.

ARTICLE XI
TERM AND TERMINATION

Section 11.1 Term.

This Agreement commenced will commence on the Effective Date and, unless terminated pursuant to Section 11.2, continue in full force and effect until the fulfillment of the later of **(a)** the expiration of Novartis' payment obligations hereunder, or **(b)** the date of expiration of the last-to-expire Patent Right that is licensed to either Party as set forth in Article V (the "Agreement Term"), subject to the survival of specified provisions of this Agreement pursuant to Section 11.3 below.

Section 11.2 Termination for Cause.

11.2.1 Breach of the Agreement. If either Party is in material breach of this Agreement, the non-breaching Party may send a written notice to the breaching Party that describes such breach in sufficient detail to permit the breaching party to cure such breach (if capable of cure). The breaching Party will have a period of [***] days to cure such breach (if capable of cure). If the breach has been timely cured, the notice of termination will be deemed null and void. If the breach has not been timely cured (or if the breach is incapable of cure), the non-breaching party will have the right to terminate the Agreement by providing written notice, and the Agreement and, if applicable, the Research Term, will terminate upon receipt of such notice, subject to a stay of termination if arbitration is pending, as set forth in Section 12.2.3.

(a) If Novartis terminates this Agreement pursuant to this Section 11.2.1, then:

(i) the following provisions will terminate as of as of the effective date of such notice: Article II (except as provided below), Article III (except as provided below), Article IV (except as provided below), Article V (except as provided below), and Article VII (except as provided below); and

(ii) the following provisions will survive such termination and continue in full force and effect thereafter: Section 2.4.2(a), Section 2.4.4, Section 2.5, Sections 3.6.2(c), Section 3.7.2(b), Section 3.7.2(c), Section 3.8.3, Section 4.1.2(a), Section 4.1.2(c), Section 4.1.2(d), Section 4.2.2, Section 4.3, Section 4.4, Section 5.2, Section 5.3.1(a), Section 5.3.2, Section 5.3.3, Section 5.3.4, Section 5.3.5, Section 5.4, Section 5.5, Section 5.6, Article VI, Section 7.3, Section 7.4 (excluding Section 7.4.8), Section 7.5, Section 7.6, Section 7.7, Section 7.8, Section 7.9 and those provisions set forth in Section 11.3.

(b) If Intellia terminates this Agreement pursuant to this Section 11.2.1, then:

(i) the following provisions will terminate as of as of the effective date of such notice: Article II, Article III (except as provided below), Article IV (except as provided below), Article V (except as provided below), Article VI, Section 7.1.2, and Section 7.2; and

(ii) the following provisions will survive such termination and continue in full force and effect thereafter: Section 3.6.2(b), Section 3.8.3, Section 3.9, Section 4.1.2(b), Section 4.1.2(e), Section 4.4, Section 5.2, Section 5.3.1(b), Section 5.3.4, Section 5.3.6, Section 5.5, Article VII (other than Sections 7.1.2 and 7.2) and those provisions set forth in Section 11.3.

(c) The Parties agree that termination pursuant to this Section 11.2.1 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. In that regard, if the money damages payable under this Agreement by reason of a breach were materially limited by reason of Section 10.5 (for reasons other than the exclusion for punitive damages), it will be assumed that the payment of money damages was not an adequate remedy for the breach unless the breaching Party elects to waive the protections of Section 12.3 (other than with respect to punitive damages) and pay the resulting amounts.

[***]

11.2.2 Termination of Business; Insolvency. Either Party may terminate this Agreement immediately by written notice to the other Party if the other Party undergoes an Insolvency Event.

(a) If Novartis terminates this Agreement pursuant to this Section 11.2.2, then:

(i) the following provisions will terminate as of as of the effective date of such notice: Article II (except as provided below), Article III (except as provided below), Article IV (except as provided below), Article V (except as provided below), and Article VII (except as provided below); and

(ii) the following provisions will survive such termination and continue in full force and effect thereafter: Section 2.4.2(a), Section 2.4.4, Section 2.5, Sections 3.6.2(c), Section 3.7.2(b), Section 3.7.2(c), Section 3.8.3, Section 4.1.2(a), Section 4.1.2(c), Section 4.1.2(d), Section 4.2.2, Section 4.3, Section 4.4, Section 5.2, Section 5.3.1(a), Section 5.3.2, Section 5.3.3, Section 5.3.4, Section 5.3.5, Section 5.4, Section 5.5, Section 5.6, Article VI, Section 7.3, Section 7.4 (excluding Section 7.4.8), Section 7.5, Section 7.6, Section 7.7, Section 7.8, Section 7.9 and those provisions set forth in Section 11.3.

(b) If Intellia terminates this Agreement pursuant to this Section 11.2.2, then:

(i) the following provisions will terminate as of as of the effective date of such notice: Article II, Article III (except as provided below), Article IV (except as provided below), Article V (except as provided below), Article VI, Section 7.1.2, and Section 7.2; and

(ii) the following provisions will survive such termination and continue in full force and effect thereafter: Section 3.6.2(b), Section 3.8.3, Section 3.9, Section 4.1.2(b), Section 4.1.2(e), Section 4.4, Section 5.2, Section 5.3.1(b), Section 5.3.4, Section 5.3.6, Section 5.5, Article VII (other than Sections 7.1.2 and 7.2), and those provisions set forth in Section 11.3.

11.2.3 Termination for IP Challenge. Intellia will have the right to terminate this Agreement in its entirety upon written notice to Novartis in the event that Novartis or any of its Affiliates directly or indirectly challenges in a legal or administrative proceeding the patentability, enforceability or validity of any Patent Rights within the Intellia Intellectual Property or the Collaboration Platform Intellectual Property (except as a defense against a claim, action or proceeding asserted by Intellia against Novartis or its Affiliates or sublicensees) (a "Novartis Patent Challenge"); *provided* that Intellia will not have the right to terminate this Agreement under this Section 11.2.3 for any such Novartis Patent Challenge by any sublicensee if such Novartis Patent Challenge is dismissed within [***] days of Intellia's notice to Novartis under this Section 11.2.3 and not thereafter continued. The effect of any such termination by Intellia (and the provisions that survive and are terminated by such a termination) will be the same as that set forth in Section 11.2.1(b) above. [***].

11.2.4 Termination for Material Failure; Termination without Cause.

(a) Material Failure.

(i) Subject to Section 11.2.4(a)(ii), Novartis will have the right to terminate this Agreement in its entirety if any of the following events occurs:

(A) In a patent application claiming priority to U.S. Patent Application Nos. 61/652,086, 61/716,256, 61/757,640, and/or 61/765,576, neither the Regents of the University of California at Berkeley ("Berkeley") nor Emmanuelle Charpentier ("Charpentier") files claims with the United States Patent & Trademark Office ("USPTO") by June 30, 2015 sufficient under 37 C.F.R. 41.203(a) to allow the USPTO to initiate an interference with one or more of the claims of U.S. Patent No. 8,697,359 (the " '359 Patent") (the "Interference Trigger");

(B) Neither the USPTO allows, nor the European Patent Office (nor any of the patent authorities or offices in France, Germany, Italy, Spain, or the United Kingdom) grants patent claims from a patent application claiming priority to U.S. Patent Application Nos. 61/652,086, 61/716,256, 61/757,640, and/or 61/765,576 (or their European counterpart) by December 31, 2017 (the "Grant Trigger"); or

(C) The owners, or any of the licensees, of the '359 Patent brings a suit against Novartis by or before December 31, 2017 claiming that activities specifically encompassed by the Research Plans infringe an independent claim of the '359 Patent (the "Litigation Trigger"); *provided*, *however*, that, Novartis will not have the right to exercise the Litigation Trigger if **(i)** the owners or any of the licensees of the '359 Patent, brings an infringement suit against Novartis under the '359 Patent solely for activities Novartis is performing independently or with other Third Parties outside of the Collaboration (*e.g.*, developing CRISPR-related research tools) or **(ii)** the owners or any of the licensees of the '359 Patent bring an infringement suit against Novartis under

the '359 Patent as a counterclaim or in response to a judicial or patent agency proceeding or suit initiated by Intellia and/or Novartis against them.

(ii) If any of the events described in Section 11.2.4(a)(i) has occurred and Novartis desires to terminate this Agreement, Novartis will comply with the following before such termination will be deemed effective:

(A) Novartis will send written notice to Intellia of its intent to terminate this Agreement identifying the relevant trigger within [***] days following the applicable date or event specified in Section 11.2.4(a)(i). [***].

(B) (1) Following Intellia's receipt of such termination notice [***], Novartis and Intellia will have a period of [***] days to discuss in good faith whether to continue with the Collaboration pursuant to the terms of this Agreement. If the Parties agree to continue the Collaboration, Novartis' termination notice will be deemed withdrawn and this Agreement will continue in full and effect on such terms. [***]. If the Parties decide not to continue the Collaboration, Novartis' termination notice will be deemed effective [***] days from the date of the notice.

(2) Following Intellia's receipt of such termination notice [***], Intellia will have a period of [***] days to seek to resolve [***], which period may be extended by mutual agreement of the Parties. If Intellia is successful, Novartis' termination notice will be deemed withdrawn and this Agreement will continue in full force and effect. If Intellia is not successful [***], Novartis' termination notice will be deemed effective [***] days from the date of the notice.

(iii) If Novartis terminates this Agreement as permitted pursuant to this Section 11.2.4(a), **(A)** all provisions [***] will terminate except for the following, which will survive such termination and continue in full force and effect thereafter: Section 3.6.2(b), Section 3.8.3, Section 3.9, Section 4.1.2(b), Section 4.1.2(e**)** Section 5.2, Section 5.3.1(b), Section 5.3.4, Section 5.3.6, Section 5.5, Section 7.4.8, and those provisions set forth in Section 11.3, and **(B)** Novartis will pay to Intellia all accrued financial obligations as of the date of such termination and will continue to pay any and all of its financial obligations under Article 7 for a period of [***] days following Novartis' notice pursuant to Section 11.2.4(a)(ii)(A).

(b) Without Cause. Novartis will have the right to terminate this Agreement without cause effective upon [***] days' written notice to Intellia. If Novartis terminates this Agreement pursuant to this Section 11.2.4(b), **(i)** all provisions (other than the provisions set forth in Section 11.3) will terminate except for the following, which will survive such termination and continue in full force and effect thereafter: Section 3.6.2(b), Section 3.8.3, Section 3.9, Section 4.1.2(b), Section 4.1.2(e**)** Section 5.2, Section 5.3.1(b), Section 5.3.4, Section 5.3.6, Section 5.5, Section 7.4.8, and those provisions set forth in Section 11.3, and **(ii)** Novartis will pay to Intellia all accrued and future financial obligations as if the Research Term continued until its natural expiration (*i.e.*, five years from the Effective Date), including all Research Funding Payments as if Intellia had fully performed and without the need by Intellia to true-up its expenses under Section 7.2.1(b).

Section 11.3 Survival.

Any termination will be without prejudice to a Party's rights to seek damages in connection with any such event. Except where explicitly provided elsewhere herein, termination of this Agreement for any reason, will not affect: **(a)** obligations which have

accrued as of the date of termination or expiration (including, as to Novartis, any and all payment obligations); and **(b)** obligations and rights which, expressly or from the context thereof, are intended to survive termination or expiration of this Agreement, including Article I, Article VIII, Article IX, Article X, this Article XI, and Article XII.

ARTICLE XII
MISCELLANEOUS

Section 12.1 Governing Law and Jurisdiction.

This Agreement and all claims between the Parties arising out of or relating to this Agreement, the transactions that it contemplates (including the Intellectual Property Rights described herein), and its and their validity, interpretation, construction, performance and enforcement will be exclusively governed by the substantive laws of the Commonwealth of Massachusetts without regard to its conflict of laws principles.

Section 12.2 Disputes.

12.2.1 Referral to Executives. Either Party may refer any question, difference, or dispute that may arise concerning the construction, meaning, or effect of this Agreement or concerning the rights and liabilities of the Parties hereunder, to the Senior Officers of Intellia and Novartis, who will attempt in good faith to resolve such question, difference or dispute. If the question, difference or dispute cannot be resolved within [***] days of such referral, either Party will be free to initiate the arbitration proceedings outlined in Section 12.2.2, below. For the avoidance of doubt, any difference or dispute arising from the JSC shall be resolved in accordance with Section 3.2.5.

12.2.2 Arbitration.

(a) General Arbitration. Unless Section 12.2.2(b) is applicable, any question, difference, or dispute relating to this Agreement that cannot be resolved through informal means as set forth in Section 12.2.1 will be exclusively and finally resolved by arbitration administered in accordance with the Rules of Judicial Administration and Arbitration Services ("JAMS") in effect at the time of

submission. Arbitration proceedings will be conducted in Boston, Massachusetts, before one mutually acceptable arbitrator selected jointly by the Parties from a panel of persons experienced in the pharmaceutical and life sciences industries (or by JAMS in accordance with its rules if the Parties are unable to reach agreement). Each Party will have all rights of discovery as provided by the Federal Rules of Civil Procedure for any arbitral proceeding pursuant to this Section 12.2.2. Either Party may apply to the arbitrator for interim injunctive relief or may seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that Party pending resolution of the matter pursuant to this Section 12.2. The Parties will have the right to be represented by counsel. Any judgment or award rendered by the arbitrator will be final and binding on the Parties, and will be governed by the terms and conditions hereof, including the limitation on damages set forth in Section 10.5. The Parties agree that such a judgment or award may be enforced in any court of competent jurisdiction. 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 12.2 are pending. The non-prevailing Party will bear its and the prevailing Party's costs and expenses and attorneys' fees in the arbitration, except that the arbitrator may order instead each Party to bear its own costs and expenses and attorneys' fees in the arbitration if the arbitrator finds that the non-prevailing Party's positions on the issues in the dispute had relative merit. The Party that does not prevail in the arbitration proceeding in all instances will pay the arbitrator's fees and expenses and any administrative fees of arbitration. All proceedings and decisions of the arbitrator(s) will be deemed Confidential Information of each of the Parties, and will be subject to Article VIII.

(b) Accelerated Arbitration. To the extent the arbitration matter involves a question, difference or dispute that either Party may submit to accelerated arbitration for resolution as permitted under the other provisions of

this Agreement, or any dispute regarding the proper characterization of a question, difference or dispute subject to resolution under this Section 12.2.2(b) as opposed to Section 12.2.2(a), the following procedures will also apply:

(i) [***]

12.2.3 Stay of Termination. Any purported termination of this Agreement under Section 11.2.1 will be automatically stayed during the pendency of any arbitration proceeding commenced under Section 12.2.2.

Section 12.3 Waiver.

No provision of this Agreement may be waived except in writing by both Parties hereto. No failure or delay by either Party hereto in exercising any right or remedy hereunder or under applicable law will operate as a waiver thereof, or a waiver of any right or remedy on any subsequent occasion.

Section 12.4 Severability.

Should one or more provisions of this Agreement be or become invalid, then the Parties hereto will attempt to agree upon valid provisions in substitution for the invalid provisions, which in their economic effect come so close to the invalid provisions that it can be reasonably assumed that the Parties would have accepted this Agreement with those new provisions. If the Parties are unable to agree on such valid provisions, the invalidity of such one or more provisions of this Agreement will not affect the validity of the Agreement as a whole, unless the invalid provisions are of such essential importance for this Agreement that it may be reasonably presumed that the Parties would not have entered into this Agreement without the invalid provisions.

Section 12.5 Government Acts.

If any Applicable Law should make impossible or prohibit, restrain, modify or limit any material act or obligation of the Parties under this Agreement, the Party, if any, not so affected, will have the right, at its option, to suspend or terminate this Agreement

as to such country, if good faith negotiations between the Parties to make such modifications therein as may be necessary to fairly address the impact thereof are not successful after a reasonable period of time (not to exceed [***] days) in producing mutually acceptable modifications to this Agreement.

Section 12.6 Export Controls.

This Agreement is made subject to any restrictions concerning the export of materials and technology from the United States that may be imposed upon or related to either Party to this Agreement from time to time by the government of the United States. Furthermore, each Party will not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products or services using such technical information to any countries for which the United States government or any agency thereof at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the Department of Commerce or other agency of the United States government when required by applicable statute or regulation.

Section 12.7 Assignment.

Neither Party may assign this Agreement or any of its rights under this Agreement or (except as otherwise expressly provided in this Agreement) delegate its performance under this Agreement, except to any of its Affiliates and to any Third Party successor to all or substantially all of the assets or business of such Party to which this Agreement relates, whether in a merger, sale of stock, sale of assets, reorganization or other transaction. Any purported assignment and/or delegation by a Party in contravention of this Section 12.7 will, at the option of the other Party, be null and void and of no effect. No assignment will release either Party from responsibility for the performance of any accrued obligation of such Party hereunder. This Agreement will be binding upon and enforceable against the administrators, legal representatives, and successors of the Parties.

Section 12.8 Affiliates.

Each Party may perform its obligations hereunder personally or through one or more Affiliates. Each Party will be solely responsible for the acts and omissions of its Affiliates. Neither Party will permit any of its Affiliates to commit any act (including any omission) that such Party is prohibited hereunder from committing directly. Any material breach of the terms and conditions of this Agreement by a Party's Affiliate will be construed as a material breach by such Party under this Agreement.

Section 12.9 Counterparts.

This Agreement may be executed in counterparts, each of which will be deemed to be original and both of which will constitute one and the same Agreement.

Section 12.10 No Agency.

Nothing herein contained will be deemed to create an agency, joint venture, amalgamation, partnership or similar relationship between Novartis and Intellia and their respective Affiliates. Notwithstanding any of the provisions of this Agreement, neither Party to this Agreement will at any time enter into, incur, or hold itself out to third parties as having authority to enter into or incur, on behalf of the other Party, any commitment, expense, or liability whatsoever, and all contracts, expenses and liabilities in connection with or relating to the obligations of each Party under this Agreement will be made, paid, and undertaken exclusively by such Party on its own behalf and not as an agent or representative of the other.

Section 12.11 Notice.

All notices, requests, demands and other communications between the Parties with respect to any of the provisions of this Agreement will be sent to the addresses set out below, or to such other addresses as may be designated by one Party to the other by notice pursuant hereto, by internationally recognized courier (*e.g.*, FedEx, DHL, *etc.*), with receipt signature required to the addresses set out below.

if to Novartis, at:

Novartis Institutes for BioMedical Research, Inc.
250 Massachusetts Avenue
Cambridge, MA 02139
Attention: Global Head, Strategic Alliances

with a required copy to:

Novartis Institutes for BioMedical Research, Inc.
250 Massachusetts Avenue
Cambridge, MA 02139
Attention: General Counsel

if to Intellia, at:

Intellia Therapeutics, Inc.
130 Brookline Street, Suite 201
Cambridge, MA 02139
Attention: Chief Executive Officer

with required copies to:

Intellia Therapeutics, Inc.
130 Brookline Street, Suite 201
Cambridge, MA 02139
Attention: General Counsel

and

Goodwin | Procter LLP
Exchange Place
53 State Street
Boston, Massachusetts 02109
Attention: Arthur R. McGivern & Karen A. Spindler

Section 12.12 [***]

[***]

Section 12.13 Securitization.[***]

Section 12.14 Third Party Beneficiaries.

The terms and conditions of this Agreement, express or implied, exist only for the benefit of the Parties and their respective successors and permitted assigns. Except under Article X, this Agreement does not confer any enforceable rights or remedies upon any Person other than the Parties.

Section 12.15 Entire Agreement; Amendment.

This Agreement, together with its Exhibits, contains the entire understanding of the Parties relating to the matters referred to herein, and may only be amended by a written document, duly executed on behalf of the respective Parties, expressly referencing this Agreement. For the avoidance of doubt, the Equity Agreements remain in full force and effect with respect to their terms; *provided* that any disclosures after the Effective Date shall be governed by the terms of this Agreement.

Section 12.16 Force Majeure.

Neither Novartis nor Intellia will be liable for failure of or delay in performing obligations set forth in this Agreement, and neither will be deemed in breach of such obligations, if such failure or delay is due to natural disasters or any causes reasonably beyond the control of Novartis or Intellia; *provided* that the Party affected will promptly notify the other of the force majeure condition and will exert all reasonable efforts to eliminate, cure or overcome any such causes and to resume performance of its obligations as soon as possible.

[Signature Page Follows]

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Executed as of the Effective Date.

NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, INC.

By: /s/ Scott Brown
Name: Scott Brown
Title: VP, General Counsel

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessan Bermingham
Name: Nessan Bermingham
Title: Chief Executive Officer

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Exhibit A

Sample Invoice

[***] INVOICE

[***]

[***]		[***]	[***]
[***]	[***]		[***]
		[***]	[***]

[***]

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Exhibit B

Novartis HSC Background Intellectual Property

The compound known at Novartis as [***]

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Exhibit C

Novartis Other Background Intellectual Property

Novartis Patent Family	Title
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

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Exhibit D

Sample Calculation of Research Costs

Intellia/Novartis Research Year:

Name	Collaboration Program X	Collaboration Program X	Collaboration Program X	Collaboration Program X	FTE Total #	FTE Expense @ $300k/FTE
A. Smith						
B. Smith						
C. Smith						
D. Smith						
FTE Total						

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

Exhibit E

Example Royalty Calculation for royalties due on Products under Section 7.4:

[***]

Example Royalty Calculation for royalties due on Products under Section 7.6.1:

[***]

130 BROOKLINE STREET
CAMBRIDGE, MASSACHUSETTS

LEASE SUMMARY SHEET

Execution Date:	October 21, 2014
Tenant:	Intellia Therapeutics, Inc., a Delaware corporation
Tenant's Mailing Address Prior to Occupancy:	Intellia Therapeutics, Inc. c/o Atlas Venture 25 First Street, Suite 303 Cambridge, Massachusetts 02141
Landlord:	MIT 130 Brookline LLC, a Massachusetts limited liability company
Building:	130 Brookline Street, Cambridge, Massachusetts. The Building consists of approximately 51,670 rentable square feet. The land on which the Building is located (the "**Land**") is more particularly described in Exhibit 2 attached hereto and made a part hereof (the Land, together with the Building, are hereinafter collectively referred to as the "**Property**").
Premises:	Approximately 15,169 rentable square feet of space, consisting of approximately 14,158 rentable square feet on the second floor, approximately 925 rentable square feet in the mechanical penthouse and approximately 86 rentable square feet on the first floor of the Building, as more particularly shown as hatched, highlighted or outlined on the plan attached hereto as Exhibit 1A and made a part hereof. The Premises consists of the First Phase and the Final Phase (each, a "**Phase**").
First Phase:	A portion of the Premises consisting of approximately 6,288 rentable square feet of space on the second (2nd) floor, as more particularly shown as hatched, highlighted or outlined on the plan attached hereto as Exhibit 1B and made a part hereof.
Final Phase:	A portion of the Premises consisting of approximately 8,881 rentable square feet of space, consisting of approximately 86 rentable square feet on the first floor, 7,870 rentable square feet on the second floor and 925 rentable square feet in the mechanical penthouse, all as more particularly shown as hatched, highlighted or outlined on the plan attached hereto as Exhibit 1C and made a part hereof.

Term Commencement Date:	With respect to the First Phase: the date on which Landlord delivers the First Phase to Tenant in its as is condition. Targeted to occur within three (3) business days after the Execution Date. With respect to the Final Phase: the date on which Landlord delivers the Final Phase to Tenant with Landlord's Work substantially complete. Targeted January 22, 2015.
Rent Commencement Date:	With respect to the First Phase: December 1, 2014. With respect to the Final Phase: the Term Commencement Date for the Final Phase; *provided*, *however*, notwithstanding the foregoing, the Rent Commencement Date for the Final Phase shall be accelerated on a day for day basis for each day of Tenant Delay (hereinafter defined).
Expiration Date:	The last day of the fifth (5th) Rent Year.[1]
Extension Terms:	Subject to Section 1.2 below, one (1) extension terms of five (5) years.
Permitted Uses:	Subject to Legal Requirements, general office, research, development and laboratory use (in proportions consistent with the base Building design), and other ancillary uses related to the foregoing.
Base Rent:	With respect to the period commencing on the Rent Commencement Date for the First Phase through and including the day immediately preceding the Rent Commencement Date for the Final Phase, Base Rent shall equal $17,616.88 per month, prorated for partial months.

[1] For the purposes of this Lease, the first "**Rent Year**" shall be defined as the period commencing as of the Rent Commencement Date for the Final Phase and ending on the last day of the twelfth full month after the Rent Commencement Date for the Final Phase occurs; provided, however, if the Rent Commencement Date for the Final Phase occurs on the first day of a calendar month, then the first Rent Year shall end on the day immediately preceding the first anniversary of the Rent Commencement Date for the Final Phase. Thereafter, "Rent Year" shall be defined as any subsequent twelve (12) month period during the term of this Lease.

RENT YEAR	ANNUAL BASE RENT	MONTHLY RENT
1	$ 510,000.00	$42,500.00
2	$ 656,625.00	$54,718.75
3	$ 820,732.40	$68,394.37
4	$ 845,354.37	$70,446.20
5	$ 870,715.00	$72,559.58

Operating Costs and Taxes: See Sections 5.2 and 5.3

Tenant's Share: A fraction, the numerator of which is the number of rentable square feet in the Premises and the denominator of which is the number of rentable square feet in the Building. For purposes of calculating Tenant's Share, the number of rentable square feet in the Building is deemed to be 51,670. As of the Rent Commencement Date for the First Phase, Tenant's Share is 12.17%. As of the Rent Commencement Date for the Final Phase, Tenant's Share is 29.36%.

Tenant's Tax Share: A fraction, the numerator of which is the number of rentable square feet in the Premises and the denominator of which is the number of rentable square feet in the Building recognized by the City of Cambridge as being used for purposes which are not exempt from real estate taxation as of the date on which the assessment is made for the tax year in question. For purposes of calculating Tenant's Tax Share, the number of rentable square feet in the Building is deemed to be 51,670. As of the Rent Commencement Date for the First Phase, Tenant's Tax Share is 12.17%. As of the Rent Commencement Date for the Final Phase, Tenant's Tax Share is 29.36%.

Landlord's Contribution: Subject to Section 3.4, Three Hundred Three Thousand Three Hundred Eighty Dollars ($303,380.00)

Security Deposit/ Letter of Credit: Subject to Section 7.1, $255,000

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THIS INDENTURE OF LEASE (this "**Lease**") is hereby made and entered into on the Execution Date by and between Landlord and Tenant.

Each reference in this Lease to any of the terms and titles contained in any Exhibit attached to this Lease shall be deemed and construed to incorporate the data stated under that term or title in such Exhibit. All capitalized terms not otherwise defined herein shall have the meanings ascribed to them as set forth in the Lease Summary Sheet which is attached hereto and incorporated herein by reference.

1. LEASE GRANT; TERM; APPURTENANT RIGHTS; EXCLUSIONS.

1.1 Lease Grant. Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises upon and subject to terms and conditions of this Lease, for a term of years commencing on the applicable Term Commencement Date and, unless earlier terminated or extended pursuant to the terms hereof, ending on the Expiration Date (the "**Initial Term**"; the Initial Term and any duly exercised Extension Terms are hereinafter collectively referred to as the "**Term**").

1.2 Extension Terms.

(a) Provided (i) Tenant, an Affiliated Entity (hereinafter defined) and/or a Successor (hereinafter defined) is/are then occupying at least seventy-five percent (75%) of the Premises; and (ii) there is no any Event of Default (1) as of the date of the Extension Notice (hereinafter defined), and (2) at the commencement of the applicable Extension Term (hereinafter defined), Tenant shall have the option to extend the Term for one (1) additional term of five (5) years (the "**Extension Term**"), commencing as of the expiration of the Initial Term. Tenant must exercise such option to extend by giving Landlord written notice (the "**Extension Notice**") on or before the date that is twelve (12) months prior to the expiration of the then-current term of this Lease, time being of the essence. Notwithstanding the foregoing, Landlord may nullify Tenant's exercise of its option to extend the Term by written notice to Tenant (the "**Nullification Notice**") if (A) on the date Landlord receives the applicable Extension Notice, there is an event which, with the passage of time and/or the giving of notice, would constitute an Event of Default hereunder and (B) Tenant fails to cure such default within the applicable cure period set forth in Section 20.1 after receipt of the applicable default notice. Upon the timely giving of the Extension Notice, the Term shall, subject to the previous sentence, be deemed extended upon all of the terms and conditions of this Lease, except that Base Rent during the Extension Term shall be calculated in accordance with this Section 1.2, Landlord shall have no obligation to construct or renovate the Premises and Tenant shall have no further right to extend the Term. If Tenant fails to give timely notice, as aforesaid, Tenant shall have no further right to extend the Term. Notwithstanding the fact that Tenant's proper and timely exercise of such option to extend the Term shall be self executing, the parties shall promptly execute a lease amendment reflecting such Extension Term after Tenant exercises such option. The execution of such lease amendment shall not be deemed to waive any of the conditions to Tenant's exercise of its rights under this Section 1.2.

(b) The Base Rent during the Extension Term (the "**Extension Term Base Rent**") shall be determined in accordance with the process described hereafter. Extension Term

Base Rent shall be the greater of (i) Base Rent for the last Rent Year of the prior term, or (ii) the fair market rental value of the Premises then demised to Tenant as of the commencement of the Extension Term as determined in accordance with the process described below, for renewals of combination laboratory and office space in the East Cambridge/Kendall Square area of equivalent quality, size, utility and location, with the length of the Extension Term and the credit standing of Tenant to be taken into account. Within thirty (30) days after receipt of the Extension Notice, Landlord shall deliver to Tenant written notice of its determination of the Extension Term Base Rent for the Extension Term. Tenant shall, within thirty (30) days after receipt of such notice, notify Landlord in writing whether Tenant accepts or rejects Landlord's determination of the Extension Term Base Rent ("**Tenant's Response Notice**"). If Tenant fails timely to deliver Tenant's Response Notice, Landlord's determination of the Extension Term Base Rent shall be binding on Tenant.

(c) If and only if Tenant's Response Notice is timely delivered to Landlord and indicates both that Tenant rejects Landlord's determination of the Extension Term Base Rent and desires to submit the matter to arbitration, then the Extension Term Base Rent shall be determined in accordance with the procedure set forth in this Section 1.2(c). In such event, within ten (10) days after receipt by Landlord of Tenant's Response Notice indicating Tenant's desire to submit the determination of the Extension Term Base Rent to arbitration, Tenant and Landlord shall each notify the other, in writing, of their respective selections of an appraiser (respectively, "**Landlord's Appraiser**" and "**Tenant's Appraiser**"). Landlord's Appraiser and Tenant's Appraiser shall then jointly select a third appraiser (the "**Third Appraiser**") within ten (10) days of their appointment. All of the appraisers selected shall be individuals with at least five (5) consecutive years' commercial appraisal experience in the area in which the Premises are located, shall be members of the Appraisal Institute (M.A.L), and, in the case of the Third Appraiser, shall not have acted in any capacity for either Landlord or Tenant within five (5) years of his or her selection. The three appraisers shall determine the Extension Term Base Rent in accordance with the requirements and criteria set forth in Section 1.2(b) above, employing the method commonly known as *Baseball Arbitration*, whereby Landlord's Appraiser and Tenant's Appraiser each sets forth its determination of the Extension Term Base Rent as defined above, and the Third Appraiser must select one or the other (it being understood that the Third Appraiser shall be expressly prohibited from selecting a compromise figure). Landlord's Appraiser and Tenant's Appraiser shall deliver their determinations of the Extension Term Base Rent to the Third Appraiser within five (5) days of the appointment of the Third Appraiser and the Third Appraiser shall render his or her decision within ten (10) days after receipt of both of the other two determinations of the Extension Term Base Rent. The Third Appraiser's decision shall be binding on both Landlord and Tenant. Each party shall bear the cost of its own appraiser and shall share equally in the cost of the Third Appraiser.

1.3 Notice of Lease. Neither party shall record this Lease, but each of the parties hereto agrees, at Tenant's option, to join in the execution, in recordable form, of a statutory notice of lease and/or written declaration in which shall be stated the Term Commencement Date with respect to the First Phase, the length of the Extension Term and the Expiration Date, which notice of lease may be recorded by Tenant with the Middlesex South Registry of Deeds and/or filed with the Registry District of the Land Court, as appropriate (collectively, the "**Registry**") at Tenant's sole cost and expense. If a notice of lease was previously recorded with the Registry, upon the expiration or earlier termination of this Lease, Landlord shall deliver to Tenant a notice

of termination of lease and Tenant shall promptly execute and deliver the same to Landlord for Landlord's execution and recordation with the Registry. If Tenant fails to deliver the executed notice of termination of lease within ten (10) days of receipt thereof, *time being of the essence*, Tenant hereby appoints Landlord as Tenant's attorney-in-fact to execute the same, such appointment being coupled with an interest.

1.4 Appurtenant Rights.

(a) Common Areas. Subject to the terms of this Lease and the Rules and Regulations (hereinafter defined), Tenant shall have, as appurtenant to the Premises, rights to use in common with others entitled thereto, the areas designated from time to time for the common use of Tenant and other tenants of the Property (such areas are hereinafter referred to as the "**Common Areas**"). The Common Areas include: (i) the common lobbies, loading docks, hallways and stairways of the Building serving the Premises, (ii) common walkways necessary for access to the Building, (iii) if the Premises include less than the entire rentable area of any floor, the common toilets and other common facilities of such floor; and (iv) other areas designated by Landlord from time to time for the common use of Tenant and other tenants of the Building; and no other appurtenant rights or easements.

(b) Parking. Commencing on the Rent Commencement Date for the First Phase, Landlord shall, subject to the terms hereof, make available five (5) parking spaces for Tenant's use in the parking areas serving the Building. Commencing on the Rent Commencement Date for the Final Phase, Landlord shall, subject to the terms hereof, make available eleven (11) parking spaces for Tenant's use in the parking areas serving the Building. The number of parking spaces in the parking areas reserved for Tenant, as modified pursuant to this Lease or as otherwise permitted by Landlord, are hereinafter referred to as the "**Parking Spaces**." Tenant shall have no right to hypothecate or encumber the Parking Spaces, and shall not sublet, assign, or otherwise transfer the Parking Spaces other than to employees of Tenant occupying the Premises or to a Successor (hereinafter defined), an Affiliated Entity (hereinafter defined) or a transferee pursuant to an approved Transfer under Section 13 of this Lease. Throughout the Term, Tenant shall pay Landlord (or at Landlord's direction, directly to the parking operator) for all of the Parking Spaces at the then-current prevailing rate, as such rate may vary from time to time. As of the Execution Date, the monthly charge for parking is Two Hundred Twenty Dollars ($220) per Parking Space per month. If, for any reason, Tenant shall fail timely to pay the charge for any of said Parking Spaces, and if such default continues for ten (10) days after written notice thereof, Tenant shall have no further right to the Parking Spaces for which Tenant failed to pay the charge under this Section 1.4(b) and Landlord may allocate such Parking Spaces for use by other tenants of the Property free and clear of Tenant's rights under this Section 1.4(b). Said Parking Spaces will be on an unassigned, non-reserved basis, and shall be subject to such reasonable rules and regulations as may be in effect for the use of the parking areas from time to time (including, without limitation, Landlord's right, without additional charge to Tenant above the prevailing rate for Parking Spaces, to institute a valet or attendant-managed parking system). Reserved and handicap parking spaces must be honored. Notwithstanding anything to the contrary contained herein, in connection with the exercise of Landlord's rights pursuant to Section 2.2 below, Landlord shall have the right to relocate the Parking Spaces from time to time to other property owned or controlled by Landlord or its affiliates, so long as such other property is within 1,000 feet of the Land.

1.5 Tenant's Access.

(a) From and after the applicable Term Commencement Date and until the end of the Term, Tenant shall have access to the applicable Phase of the Premises twenty-four (24) hours a day, seven (7) days a week, subject to Legal Requirements, the Rules and Regulations, the terms of this Lease, Landlord's Force Majeure (hereinafter defined) and matters of record.

(b) Tenant shall have the right to access the Final Phase, at Tenant's sole risk, in the two-week period prior to the Term Commencement Date with respect to the Final Phase, for the purpose of installing Tenant's furniture, fixtures and equipment therein, provided such access does not materially interfere with the preparation for or performance of Landlord's Work (hereinafter defined). Tenant shall, prior to the first entry to the Final Phase pursuant to this Section 1.5(b), provide Landlord with certificates of insurance evidencing that the insurance required in Section 14 hereof is in full force and effect and covering any person or entity entering the Building. Tenant shall defend, indemnify and hold the Landlord Parties (hereinafter defined) harmless from and against any and all Claims (hereinafter defined) for injury to persons or property resulting from or relating to Tenant's access to and use of the Final Phase prior to the Term Commencement Date with respect to the Final Phase as provided under this Section 1.5(b) except to the extent caused by the negligence or willful misconduct of any of the Landlord Parties. Tenant shall coordinate any access to the Final Phase pursuant to this Section 1.5(b) with Landlord's property manager.

1.6 Exclusions. The following are expressly excluded from the Premises and reserved to Landlord: all the perimeter walls of the Premises (except the inner surfaces thereof), the Common Areas, and any space in or adjacent to the Premises used for shafts, stacks, pipes, conduits, wires and appurtenant fixtures, fan rooms, ducts, electric or other utilities, sinks not dedicated exclusively for Tenant's use or other Building facilities, and the use of all of the foregoing, except as expressly permitted pursuant to Section 1.4 above.

2. RIGHTS RESERVED TO LANDLORD.

2.1 Additions and Alterations. Landlord reserves the right, at any time and from time to time, to make such changes, alterations, additions, improvements, repairs or replacements in or to the Property (including the Premises but, with respect to the Premises, only for purposes of repairs, maintenance, replacements and other rights expressly reserved to Landlord herein) and the fixtures and equipment therein, as well as in or to the street entrances and/or the Common Areas, as it may deem necessary or desirable, provided, however, that there be no material obstruction of access to, or material interference with the use and enjoyment of, the Premises by Tenant, nor any reduction of the usable floor area of the Premises in more than a de minimis manner. Subject to the foregoing, upon reasonable prior notice to Tenant, Landlord expressly reserves the right to temporarily close all, or any portion, of the Common Areas for the purpose of making repairs or changes thereto.

2.2 Additions to the Property. Landlord may at any time or from time to time construct additional improvements in all or any part of the Property, including, without limitation, adding additional buildings or changing the location or arrangement of any

improvement in or on the Property or all or any part of the Common Areas, or add or deduct any land to or from the Property; provided that there shall be no material increase in Tenant's obligations or material interference with Tenant's rights under this Lease in connection with the exercise of the foregoing reserved rights.

2.3 Name and Address of Building. Landlord reserves the right at any time and from time to time to change the name or address of the Building and/or the Property, provided Landlord gives Tenant at least three (3) months' prior written notice thereof.

2.4 Landlord's Access. Subject to the terms of this Section 2.4 and Section 2.6 below, Tenant shall (a) upon as much advance notice as is practical under the circumstances, and in any event at least twenty-four (24) hours' prior written notice (except that no notice shall be required in emergency situations), permit Landlord and any holder of a Mortgage (hereinafter defined) (each such holder, a "**Mortgagee**"), and their agents, employees and contractors, to access to and to enter upon the Premises at all reasonable hours for the purposes of inspection, making repairs, replacements or improvements in or to the Premises or the Building or equipment therein (including, without limitation, sanitary, electrical, heating, air conditioning or other systems), complying with all applicable laws, ordinances, rules, regulations, statutes, by-laws, court decisions and orders and requirements of all public authorities (collectively, "**Legal Requirements**"), or exercising any right reserved to Landlord under this Lease (including without limitation the right to take upon or through, or to keep and store within the Premises all necessary materials, tools and equipment); (b) permit Landlord and its agents and employees, at reasonable times, upon reasonable advance notice, to show the Premises during normal business hours (i.e. Monday - Friday 8 A.M. – 6 P.M., Saturday 8 A.M. – 1 P.M., excluding holidays) to any prospective Mortgagee or purchaser of the Building and/or the Property or of the interest of Landlord therein, and, during the last nine (9) months of the Term, prospective tenants; (c) upon reasonable prior written notice from Landlord, permit Landlord and its agents, at Landlord's sole cost and expense, to perform environmental audits, environmental site investigations and environmental site assessments ("**Site Assessments**") in, on, under and at the Premises and the Land, it being understood that Landlord shall repair any damage arising as a result of the Site Assessments, and such Site Assessments may include both above and below the ground testing and such other tests as may be necessary or appropriate to conduct the Site Assessments; and (d) in case any excavation shall be made for building or improvements or for any other purpose upon the land adjacent to or near the Premises, afford without charge to Landlord, or the person or persons, firms or corporations causing or making such excavation, license to enter upon the Premises for the purpose of doing such work as Landlord or such person or persons, firms or corporation shall deem to be necessary to preserve the walls or structures of the Building from injury, and to protect the Building by proper securing of foundations. The parties agree and acknowledge that, despite reasonable and customary precautions (which Landlord agrees it shall exercise), any property or equipment in the Premises of a delicate, fragile or vulnerable nature may nevertheless be damaged in the course of cleaning and maintenance services being performed. Accordingly, Tenant shall take reasonable protective precautions with unusually fragile, vulnerable or sensitive property and equipment.

2.5 Pipes, Ducts and Conduits. Tenant shall permit Landlord to erect, use, maintain and relocate pipes, ducts and conduits in and through the Premises, provided the same do not materially reduce the floor area or materially adversely affect the appearance thereof.

2.6 Minimize Interference. Subject to the provisions of this Lease, Tenant agrees to cooperate with Landlord as reasonably necessary in connection with the exercise of Landlord's rights under this Section 2. Tenant further agrees that dust, noise, vibration, temporary closures of Common Areas, or other inconvenience or annoyance resulting from the exercise of Landlord's rights under Section 2.1 and 2.2 shall not be deemed to be a breach of Landlord's obligations under the Lease, so long as Landlord shall, except in the event of an emergency, use reasonable efforts, consistent with accepted construction practice when applicable, to avoid unreasonably interfering with the conduct of Tenant's business and Tenant's use and occupancy of the Premises. Notwithstanding the foregoing, in no event shall any of the space leased by Tenant at the Property under this Lease be deprived of safe and reasonable access or rendered untenantable for the Permitted Uses by reason of Landlord's exercise of its rights under this Section 2.

3. CONDITION OF PREMISES; CONSTRUCTION.

3.1 Condition of Premises. Subject to Landlord's obligation to perform Landlord's Work (hereinafter defined), Tenant acknowledges and agrees that Tenant is leasing the Premises in their "**AS IS**," "**WHERE IS**" condition and with all faults on the Execution Date, without representations or warranties, express or implied, in fact or by law, of any kind, and without recourse to Landlord.

3.2 Landlord's Work. Subject to delays due to governmental regulation, unusual scarcity of or inability to obtain labor or materials, labor difficulties affecting the Cambridge vicinity generally (as opposed to Landlord in particular), casualty or other causes reasonably beyond Landlord's control (collectively "**Landlord's Force Majeure**") and subject to any act or omission by Tenant and/or Tenant's agents, servants, employees, consultants, contractors, subcontractors, licensees and/or subtenants (collectively with Tenant, the "**Tenant Parties**") which causes an actual delay in the substantial completion of Landlord's Work and of which Landlord has provided Tenant written notice (a "**Tenant Delay**"). Landlord shall perform the improvements and other work with respect to the Final Phase ("**Landlord's Work**") more particularly described in Exhibit 3 attached hereto.

3.3 Punchlist Items. Promptly following delivery of the Final Phase to Tenant with Landlord's Work substantially complete, Landlord shall provide Tenant with a list prepared by Landlord's architect (the "**Punchlist**") of outstanding items (the "**Punchlist Items**") which (a) need to be performed to complete Landlord's Work, and (b) do not materially impair Tenant's ability to use the Premises for the Permitted Use. Subject to Landlord's Force Majeure and Tenant Delays, Landlord shall, unless otherwise specified on the Punchlist, complete all Punchlist Items within sixty (60) days of the date of the Punchlist.

3.4 Landlord's Contribution.

(a) Amount. As an inducement to Tenant's entering into this Lease, Landlord shall, subject to the last sentence of this Section 3.4(a), pay for up to Three Hundred Three Thousand Three Hundred Eighty Dollars ($303,380.00) ("**Landlord's Contribution**") of the costs incurred in connection with the performance of Landlord's Work. Notwithstanding anything to the contrary, Landlord's Contribution shall not be applied to any of the following

"**Excluded Construction Costs**" (all of which shall be paid for by Tenant): (i) the cost of any of Tenant's Property (hereinafter defined), including without limitation the Exterior Signage, telecommunications and computer equipment and all associated wiring and cabling, any de-mountable decorations, artwork and partitions, signs, and trade fixtures, (ii) the cost of any fixtures or Alterations that will be removed at the end of the Term, or (iii) more than Thirty Thousand Three Hundred Thirty-Eight ($30,338) of any so-called "soft costs."

(b) Responsibility for Costs. The cost of designing, permitting and performing Landlord's Work (collectively, the "**Work Costs**") shall be paid by Landlord, subject to reimbursement pursuant to this Section 3.4(b). For purposes hereof, the "**Permitted Costs**" shall mean the Work Costs less the Excluded Construction Costs.

(i) Landlord shall cause to be prepared and delivered to Tenant a budget setting forth in reasonable detail the estimated Permitted Costs and the Excluded Construction Costs for Landlord's Work. Tenant shall have a period of five (5) business days after receipt of such budget, *time being of the essence*, to notify Landlord whether Tenant approves such budget or that Tenant wishes to conduct value engineering in order to reduce the cost of Landlord's Work (if Tenant does not timely provide such notice, Tenant shall be deemed to have (A) approved such budget and (B) elected not to conduct such value engineering). If Tenant elects to conduct value engineering, then any delays to substantial completion of Landlord's Work arising from such value engineering shall be deemed to be Tenant Delays.

(ii) Within fifteen (15) days after Tenant's approval (or deemed approval) of the budget for Landlord's Work, Tenant shall pay to Landlord (A) cash in an amount equal to fifty percent (50%) of the PC Deposit (the "**Initial PC Deposit**"), and (B) cash in an amount equal to the estimated Excluded Construction Costs (the "**ECC Deposit**"), which deposit shall be applied to the Excluded Construction Costs. Within fifteen (15) days after Landlord delivers to Tenant notice that Landlord's Work is one-third complete, Tenant shall pay to Landlord cash in an amount equal to fifty percent (50%) of the PC Deposit (the "**Second PC Deposit**"), which deposit shall be applied to the Permitted Costs. For purposes hereof, the "**PC Deposit**" shall mean an amount equal to the estimated Permitted Costs (as set forth in the budget approved by (or deemed approved by) Tenant) less Landlord's Contribution.

(iii) In the event that the Permitted Costs exceed the sum of Landlord's Contribution and the PC Deposit, then Tenant shall, within thirty (30) days after demand therefor from time to time, reimburse Landlord for such excess. In the event that the Permitted Costs are less than the sum of Landlord's Contribution and the PC Deposit, then, so long as there is no uncured Event of Default, Landlord shall, within thirty (30) days after determination of such excess, reimburse Tenant for any unused portion of the PC Deposit (it being understood and agreed that Tenant shall not be entitled to any unused portion of Landlord's Contribution), less any amounts then due and owing to Landlord.

(iv) In the event that the Excluded Construction Costs exceed the ECC Deposit, then Tenant shall, within thirty (30) days after demand therefor from time to

time, reimburse Landlord for such excess. In the event that the Excluded Construction Costs are less than the ECC Deposit, then, so long as there is no uncured Event of Default, Landlord shall, within thirty (30) days after determination of such excess, reimburse Tenant for such excess, less any amounts then due and owing to Landlord.

3.5 Remedies for Late Delivery.

(a) Subject to Landlord's Force Majeure and Tenant Delays, if the Term Commencement Date for the Final Phase has not occurred on or before April 22, 2015, then the Rent Commencement Date for the Final Phase shall be delayed one day for each day between such date and the Term Commencement Date for the Final Phase.

(b) Subject to Landlord's Force Majeure and Tenant Delays, if the Term Commencement Date for the Final Phase has not occurred on or before July 22, 2015, then Tenant shall be entitled to terminate this Lease by thirty (30) days' prior written notice to Landlord (provided that such notice shall be of no force and effect if the Term Commencement Date for the Final Phase occurs within such 30 day period).

(c) The remedies set forth in this Section 3.5 are Tenant's sole and exclusive rights and remedies if the Term Commencement Date for the Final Phase does not occur on or before April 15, 2015.

4. USE OF PREMISES.

4.1 Permitted Uses. During the Term, Tenant shall use the Premises only for the Permitted Uses and for no other purposes. Service and utility areas (whether or not a part of the Premises) shall be used only for the particular purpose for which they are designed. All corridor doors, when not in use, shall be kept closed.

4.2 Prohibited Uses.

(a) Notwithstanding any other provision of this Lease, Tenant shall not use the Premises or the Building, or any part thereof, or suffer or permit the use or occupancy of the Premises or the Building or any part thereof by any of the Tenant Parties (i) in a manner which would violate any of the covenants, agreements, terms, provisions and conditions of this Lease or otherwise applicable to or binding upon the Premises; (ii) for any unlawful purposes or in any unlawful manner; (iii) which, in the reasonable judgment of Landlord (taking into account the use of the Building as a combination laboratory, research and development and office building and the Permitted Uses) shall (a) impair the appearance or reputation of the Building; (b) impair, interfere with or otherwise diminish the quality of any of the Building services or the proper and economic heating, cleaning, ventilating, air conditioning or other servicing of the Building or Premises, or the use or occupancy of any of the Common Areas; (c) occasion discomfort, inconvenience or annoyance in any material respect (and Tenant shall not install or use any electrical or other equipment of any kind which, in the reasonable judgment of Landlord, will cause any such impairment, interference, discomfort, inconvenience, annoyance or injury), or cause any injury or damage to any occupants of the Premises or other tenants or occupants of the Building or their property; or (d) cause harmful air emissions, laboratory odors or noises or any unusual or other objectionable odors, noises or emissions to emanate from the Premises; (iv) in a

manner which is inconsistent with the operation and/or maintenance of the Building as a first-class combination office, research, development and laboratory facility; (v) for any fermentation processes whatsoever; or (vi) in a manner which shall increase such insurance rates on the Building or on property located therein over that applicable when Tenant first took occupancy of the First Phase hereunder.

(b) With respect to the use and occupancy of the Premises and the Common Areas, Tenant will not: (i) place or maintain any signage, trash, refuse or other articles in any vestibule or entry of the Premises, on the footwalks or corridors adjacent thereto or elsewhere on the exterior of the Premises, nor obstruct any driveway, corridor, footwalk, parking area, mall or any other Common Areas; (ii) permit undue accumulations of or burn garbage, trash, rubbish or other refuse within or without the Premises; (iii) permit the parking of vehicles so as to interfere with the use of any driveway, corridor, footwalk, parking area, or other Common Areas; (iv) receive or ship articles of any kind outside of those areas reasonably designated by Landlord; (v) conduct or permit to be conducted any auction, going out of business sale, bankruptcy sale (unless directed by court order), or other similar type sale in or connected with the Premises; (vi) use the name of the Building, the Property, Landlord, or any of Landlord's affiliates or subsidiaries or any photograph, film, drawing, or other depiction or representation of the Building and/or the Property or any part thereof, which contains signage or distinctive architectural characteristics that cause the scene photographed, filmed, drawn, depicted, or represented to be identifiable as being the Building and/or the Property, in any publicity, promotion, trailer, press release, advertising, printed, or display materials without Landlord's prior written consent; or (vii) except in connection with Alterations (hereinafter defined) approved by Landlord, cause or permit any hole to be drilled or made in any part of the Building.

5. RENT; ADDITIONAL RENT.

5.1 Base Rent. During the Term, Tenant shall pay to Landlord Base Rent in equal monthly installments, in advance and without demand on the first day of each month for and with respect to such month. The payment of Base Rent and additional rent and other charges reserved and covenanted to be paid under this Lease with respect to the Premises (collectively, "**Rent**") shall commence on the applicable Rent Commencement Date, and shall be prorated for any partial months. Rent shall be payable to Landlord or, if Landlord shall so direct in writing, to Landlord's agent or nominee, in lawful money of the United States which shall be legal tender for payment of all debts and dues, public and private, at the time of payment.

5.2 Operating Costs.

(a) "**Operating Costs**" shall mean all costs incurred and expenditures of whatever nature made by Landlord in the operation and management of the Building or allocated to the Building, including without limitation any costs for utilities supplied to the Common Areas, cost of compliance with Legal Requirements (including without limitation the PTDM (hereinafter defined)), and any costs for repair and replacements, cleaning and maintenance of the Common Areas, related equipment, facilities and appurtenances and HVAC equipment, a commercially reasonable management fee paid to Landlord's property manager, the costs of Landlord's management office for the Property, the cost of operating any amenities in the Property available to all tenants of the Property and any subsidy provided by Landlord for or

with respect to any such amenity. For costs and expenditures made by Landlord in connection with the operation, management, repair, replacement, maintenance and insurance of the Building as a whole, Landlord shall make a reasonable allocation thereof between the retail and non-retail portions of the Building, if applicable. To the extent that a cost included in Operating Costs is also allocable to property other than the Property, such cost shall be equitably allocated to each parcel of property which benefits from such cost. Operating Costs shall not include Excluded Costs (hereinafter defined). Landlord shall have the right but not the obligation, from time to time, to equitably allocate some or all of the Operating Costs among different tenants of the Building (for example, and without limiting the generality of the foregoing, based in whole or in part on shared or similar use of particular systems or equipment).

(b) "**Excluded Costs**" shall be defined as (i) any mortgage charges (including interest, principal, points and fees); (ii) brokerage commissions; (iii) salaries of executives and owners not directly employed in the management/operation of the Property; (iv) the cost of work done by Landlord for a particular tenant; (v) subject to Subsection 5.2(h) below, capital expenditures; (vi) the costs of Landlord's Work and any contributions made by Landlord to any tenant of the Property in connection with the build-out of its premises; (vii) franchise or income taxes imposed on Landlord; (viii) costs paid directly by individual tenants to suppliers, including tenant electricity, telephone and other utility costs; (ix) increases in premiums for insurance when such increase is caused by the use of the Building by Landlord or any other tenant of the Building; (x) maintenance and repair of capital items not a part of the Building or the Property; (xi) depreciation of the Building; (xii) costs relating to maintaining Landlord's existence as a corporation, partnership or other entity; (xiii) advertising and other fees and costs incurred in procuring tenants; (xiv) the cost of any items for which Landlord is reimbursed by insurance, condemnation awards, refund, rebate or otherwise, and any expenses for repairs or maintenance to the extent covered by warranties, guaranties and service contracts; and (xv) costs incurred in connection with any disputes between Landlord and its employees, between Landlord and Building management, or between Landlord and other tenants or occupants.

(c) "**Capital Interest Rate**" shall be defined as an annual rate of either one percentage point over the AA Bond rate (Standard & Poor's corporate composite or, if unavailable, its equivalent) as reported in the financial press at the time the capital expenditure is made or, if the capital item is acquired through third party financing, then the actual (including fluctuating) rate paid by Landlord in financing the acquisition of such capital item.

(d) "**Annual Charge Off**" shall be defined as the annual amount of principal and interest payments which would be required to repay a loan ("**Capital Loan**") in equal monthly installments over the Useful Life (hereinafter defined), of the capital item in question on a direct reduction basis at an annual interest rate equal to the Capital Interest Rate, where the initial principal balance is the cost of the capital item in question.

(e) "**Useful Life**" shall be reasonably determined by Landlord in accordance with sound accounting principles and practices consistently applied. Notwithstanding the foregoing, if Landlord reasonably concludes on the basis of engineering estimates that a particular capital expenditure will effect savings in Operating Costs including, without limitation, energy related costs, and that such annual projected savings will exceed the Annual Charge Off of Capital Expenditures computed as aforesaid, then and in such event, the Annual

Charge Off shall be determined based upon a Useful Life which would cause the principal and interest payments in a full repayment of the Capital Loan in question to equal the amount of projected savings of such Useful Life.

(f) Payment of Operating Costs. Tenant shall pay to Landlord, as additional rent, Tenant's Share of Operating Costs. Landlord may make a good faith estimate of Tenant's Share of Operating Costs for any fiscal year or part thereof during the term, and Tenant shall pay to Landlord, on the Rent Commencement Date for the First Phase and on the first (1st) day of each calendar month thereafter, an amount equal to Tenant's Share of Operating Costs for such fiscal year and/or part thereof divided by the number of months therein. Landlord may estimate and re-estimate Tenant's Share of Operating Costs and deliver a copy of the estimate or re-estimate to Tenant. Thereafter, the monthly installments of Tenant's Share of Operating Costs shall be appropriately adjusted in accordance with the estimations so that, by the end of the fiscal year in question, Tenant shall have paid all of Tenant's Share of Operating Costs as estimated by Landlord. Any amounts paid based on such an estimate shall be subject to adjustment as herein provided when actual Operating Costs are available for each fiscal year.

(g) Annual Reconciliation. Landlord shall, within one hundred twenty (120) days after the end of each fiscal year, deliver to Tenant a reasonably detailed statement of the actual amount of Operating Costs for such fiscal year ("**Year End Statement**"). Failure of Landlord to provide the Year End Statement within the time prescribed shall not relieve Tenant from its obligations hereunder. If the total of such monthly remittances on account of any fiscal year is greater than Tenant's Share of Operating Costs actually incurred for such fiscal year, then, provided there is no Event of Default nor any Monetary Default, Tenant may credit the difference against the next installment of additional rent on account of Operating Costs due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord (it being understood and agreed that if Tenant cures any default prior to the expiration of the notice and/or cure periods set forth in Section 20.1 below, Tenant shall then be entitled to take such credit). If the total of such remittances is less than Tenant's Share of Operating Costs actually incurred for such fiscal year, Tenant shall pay the difference to Landlord, as additional rent hereunder, within ten (10) days of Tenant's receipt of an invoice therefor. Landlord's estimate of Operating Costs for the next fiscal year shall be based upon the Operating Costs actually incurred for the prior fiscal year as reflected in the Year-End Statement plus a reasonable adjustment based upon estimated increases in Operating Costs. The provisions of this Section 5.2(g) shall survive the expiration or earlier termination of this Lease.

(h) Capital Expenditures. If, during the Term, Landlord shall replace any capital items or make any capital expenditures (collectively, "**Capital Expenditures**") the total amount of which (net of any warranty claims) is not properly includable in Operating Costs for the fiscal year in which they were made, in accordance with sound accounting principles and practices consistently applied in effect at the time of such replacement, there shall nevertheless be included in such Operating Costs (and in Operating Costs for each succeeding fiscal year) the amount, if any, by which the Annual Charge Off (determined as hereinafter provided) of such Capital Expenditure (less insurance proceeds, if any, collected by Landlord by reason of damage to, or destruction of the capital item being replaced) exceeds the Annual Charge Off of the

Capital Expenditure for the item being replaced. If a new capital item is acquired which does not replace another capital item, and such new capital item being acquired is either (i) required by any Legal Requirements enacted after the Execution Date or (ii) reasonably projected to reduce Operating Costs, then there shall be included in Operating Costs for each fiscal year in which and after such capital expenditure is made the Annual Charge Off of such capital expenditure.

(i) Part Years. If the Rent Commencement Date for the First Phase or the Expiration Date occurs in the middle of a fiscal year, Tenant shall be liable for only that portion of the Operating Costs with respect to such fiscal year within the Term.

(j) Gross-Up. If, during any fiscal year, less than all of the Building is occupied by tenants or if Landlord was not supplying all tenants with the services being supplied to Tenant hereunder, actual Operating Costs incurred shall be reasonably extrapolated by Landlord on an item-by-item basis to the reasonable Operating Costs that would have been incurred if the Building was fully occupied and such services were being supplied to all tenants, and such extrapolated Operating Costs shall, for all purposes hereof, be deemed to be the Operating Costs for such fiscal year.

(k) Audit Right. Provided there is no Event of Default nor any Monetary Default, Tenant may inspect or audit Landlord's records relating to Operating Costs for any periods of time within the previous fiscal year before the audit or inspection. However, no audit or inspection shall extend to periods of time before the Rent Commencement Date for the First Phase. Landlord shall make its books and records relating to Operating Costs for the previous fiscal year available for inspection by Tenant within thirty (30) days after receipt of written notice from Tenant indicating that Tenant desires to exercise its inspection and audit rights under this Section 5.2(k). If Tenant fails to object to the calculation of Tenant's Share of Operating Costs on the Year-End Statement within ninety (90) days after receipt of the Year End Statement and/or fails to complete any such audit or inspection within one hundred eighty (180) days after receipt of the Year End Statement, then Tenant shall be deemed to have waived its right to object to the calculation of Tenant's Share of Operating Costs for the year in question and the calculation thereof as set forth on such statement shall be final. Tenant's audit or inspection shall be conducted only at Landlord's offices or the offices of Landlord's property manager during business hours reasonably designated by Landlord. Tenant shall pay the cost of such audit or inspection. Tenant may not conduct an inspection or have an audit performed more than once during any fiscal year. If such inspection or audit reveals that an error was made in the calculation of Tenant's Share of Operating Costs previously charged to Tenant, then, provided no there is no Event of Default nor any Monetary Default, Tenant may credit the difference against the next installment of additional rent on account of Operating Costs due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord. If such inspection or audit reveals an underpayment by Tenant, then Tenant shall pay to Landlord, as additional rent hereunder, any underpayment of any such costs, as the case may be, within ten (10) days after receipt of an invoice therefor. Tenant shall maintain the results of any such audit or inspection confidential and shall not be permitted to use any third party to perform such audit or inspection, other than an independent firm of certified public accountants (A) reasonably acceptable to Landlord, (B) which is not compensated on a contingency fee basis or in any other manner which

is dependent upon the results of such audit or inspection, and (C) which executes Landlord's standard confidentiality agreement whereby it shall agree to maintain the results of such audit or inspection confidential. The provisions of this Section 5.2(k) shall survive the expiration or earlier termination of this Lease.

5.3 Taxes.

(a) "**Taxes**" shall mean the real estate taxes and other taxes, levies and assessments imposed upon the Property, and upon any personal property of Landlord used in the operation of the Property, or on Landlord's interest in the Property or such personal property or reasonably allocated thereto; charges, fees and assessments for transit, housing, police, fire or other services or purported benefits to the Property (including without limitation any community preservation assessments); service or user payments in lieu of taxes; and any and all other taxes, levies, betterments, assessments and charges arising from the ownership, leasing, operation, use or occupancy of the Building or based upon rentals derived therefrom, which are or shall be imposed by federal, state, county, municipal or other governmental authorities. Taxes shall not include any inheritance, estate, succession, gift, franchise, rental, income, transfer or profit tax, capital stock tax, capital levy or excise, or any income taxes arising out of or related to the ownership and operation of the Property, provided, however, that any of the same and any other tax, excise, fee, levy, charge or assessment, however described, that may in the future be levied or assessed as a substitute for or an addition to, in whole or in part, any tax, levy or assessment which would otherwise constitute Taxes, whether or not now customary or in the contemplation of the parties on the Execution Date of this Lease, shall constitute Taxes, but only to the extent calculated as if the Property were the only real estate owned by Landlord. "Taxes" shall also include reasonable expenses (including without limitation legal and consultant fees) of tax abatement or other proceedings contesting assessments or levies.

(b) "**Tax Period**" shall be any fiscal/tax period in respect of which Taxes are due and payable to the appropriate governmental taxing authority (i.e., as mandated by the governmental taxing authority), any portion of which period occurs during the Term of this Lease.

(c) Payment of Taxes. Tenant shall pay to Landlord, as additional rent, Tenant's Tax Share of Taxes. Landlord may make a good faith estimate of the Taxes to be due by Tenant for any Tax Period or part thereof during the Term, and Tenant shall pay to Landlord, on the Rent Commencement Date for the First Phase and on the first (1st) day of each calendar month thereafter, an amount equal to Tenant's Tax Share of Taxes for such Tax Period or part thereof divided by the number of months therein. Landlord may estimate and re-estimate Tenant's Tax Share of Taxes and deliver a copy of the estimate or re-estimate to Tenant. Thereafter, the monthly installments of Tenant's Tax Share of Taxes shall be appropriately adjusted in accordance with the estimations so that, by the end of the Tax Period in question, Tenant shall have paid all of Tenant's Tax Share of Taxes as estimated by Landlord. Any amounts paid based on such an estimate shall be subject to adjustment as herein provided when actual Taxes are available for each Tax Period. If the total of such monthly remittances is greater than Tenant's Tax Share of Taxes actually due for such Tax Period, then, provided there is no Event of Default nor any Monetary Default, Tenant may credit the difference against the next installment of additional rent on account of Taxes due hereunder, except that if such difference is

determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord (it being understood and agreed that if Tenant cures any default prior to the expiration of the notice and/or cure periods set forth in Section 20.1 below, Tenant shall then be entitled to take such credit). If the total of such remittances is less than Tenant's Tax Share of Taxes actually due for such Tax Period, Tenant shall pay the difference to Landlord, as additional rent hereunder, within thirty (30) days of Tenant's receipt of an invoice therefor. Landlord's estimate for the next Tax Period shall be based upon actual Taxes for the prior Tax Period plus a reasonable adjustment based upon estimated increases in Taxes. In the event that Payments in Lieu of Taxes ("**PILOT**"), instead of or in addition to Taxes, are separately assessed to certain portions of the Building or the Property including the Premises, Taxes shall be deemed to include PILOT. The provisions of this Section 5.3(c) shall survive the expiration or earlier termination of this Lease.

(d) Effect of Abatements. Appropriate credit against Taxes or PILOT shall be given for any refund obtained by reason of a reduction in any Taxes by the assessors or the administrative, judicial or other governmental agency responsible therefor after deduction of Landlord's expenditures for reasonable legal fees and for other reasonable expenses incurred in obtaining the Tax or PILOT refund.

(e) Part Years. If the Rent Commencement Date for the First Phase or the Expiration Date occurs in the middle of a Tax Period, Tenant shall be liable for only that portion of the Taxes, as the case may be, with respect to such Tax Period within the Term.

5.4 Late Payments.

(a) Any payment of Rent due hereunder not paid when due shall bear interest for each month or fraction thereof from the due date until paid in full at the annual rate often percent (10%), or at any applicable lesser maximum legally permissible rate for debts of this nature (the "**Default Rate**"). Acceptance of interest shall not constitute a waiver of Tenant's default with respect to the overdue amount or prevent Landlord from exercising any of the other rights and remedies available to Landlord under this Lease or at law or in equity now or hereafter in effect. Notwithstanding the foregoing, Tenant shall be entitled to a grace period of five (5) business days after written notice from Landlord with respect to the first late payment in any Rent Year.

(b) For each Tenant payment check to Landlord that is returned by a bank for any reason, Tenant shall pay a returned check charge equal to the amount as shall be customarily charged by Landlord's bank at the time.

(c) Money paid by Tenant to Landlord shall be applied to Tenant's account in the following order: first, to any unpaid additional rent, including without limitation late charges, returned check charges, legal fees and/or court costs chargeable to Tenant hereunder; and then to unpaid Base Rent.

5.5 No Offset; Independent Covenants; Waiver. Rent shall be paid without notice or demand, and without setoff, counterclaim, defense, abatement, suspension, deferment, reduction

or deduction, except as expressly provided herein. **TENANT WAIVES ALL RIGHTS (I) TO ANY ABATEMENT, SUSPENSION, DEFERMENT, REDUCTION OR DEDUCTION OF OR FROM RENT, AND (II) TO QUIT, TERMINATE OR SURRENDER THIS LEASE OR THE PREMISES OR ANY PART THEREOF, EXCEPT AS EXPRESSLY PROVIDED HEREIN. TENANT HEREBY ACKNOWLEDGES AND AGREES THAT THE OBLIGATIONS OF TENANT HEREUNDER SHALL BE SEPARATE AND INDEPENDENT COVENANTS AND AGREEMENTS, THAT RENT SHALL CONTINUE TO BE PAYABLE IN ALL EVENTS AND THAT THE OBLIGATIONS OF TENANT HEREUNDER SHALL CONTINUE UNAFFECTED, UNLESS THE REQUIREMENT TO PAY OR PERFORM THE SAME SHALL HAVE BEEN TERMINATED PURSUANT TO AN EXPRESS PROVISION OF THIS LEASE. LANDLORD AND TENANT EACH ACKNOWLEDGES AND AGREES THAT THE INDEPENDENT NATURE OF THE OBLIGATIONS OF TENANT HEREUNDER REPRESENTS FAIR, REASONABLE, AND ACCEPTED COMMERCIAL PRACTICE WITH RESPECT TO THE TYPE OF PROPERTY SUBJECT TO THIS LEASE, AND THAT THIS AGREEMENT IS THE PRODUCT OF FREE AND INFORMED NEGOTIATION DURING WHICH BOTH LANDLORD AND TENANT WERE REPRESENTED BY COUNSEL SKILLED IN NEGOTIATING AND DRAFTING COMMERCIAL LEASES IN MASSACHUSETTS, AND THAT THE ACKNOWLEDGEMENTS AND AGREEMENTS CONTAINED HEREIN ARE MADE WITH FULL KNOWLEDGE OF THE HOLDING IN WESSON V. LEONE ENTERPRISES, INC., 437 MASS. 708 (2002). SUCH ACKNOWLEDGEMENTS, AGREEMENTS AND WAIVERS BY TENANT ARE A MATERIAL INDUCEMENT TO LANDLORD ENTERING INTO THIS LEASE**.

5.6 Survival. Any obligations under this Section 5 which shall not have been paid at the expiration or earlier termination of the Term shall survive such expiration or earlier termination and shall be paid when and as the amount of same shall be determined and be due.

6. INTENTIONALLY OMITTED.

7. LETTER OF CREDIT.

7.1 Amount.

(a) Contemporaneously with the execution of this Lease, Tenant shall deliver to Landlord either (i) cash in an amount specified in the Lease Summary Sheet (the "**Cash Security Deposit**"), which shall be held by Landlord in accordance with Section 7.5 below, or (ii) an irrevocable letter of credit which shall (a) be in the amount specified in the Lease Summary Sheet and otherwise in the form attached hereto as Exhibit 4; (b) issued by a bank reasonably acceptable to Landlord upon which presentment may be made in Boston, Massachusetts (if Landlord so requires at the time of its approval thereof); and (c) be for a term of one (1) year, subject to extension in accordance with the terms hereof (the "**Letter of Credit**"). The Letter of Credit shall be held by Landlord, without liability for interest, as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease by the Tenant to be kept and performed during the Term. In no event shall the Letter of Credit be deemed to be a prepayment of Rent nor shall it be considered a measure of

liquidated damages. Unless the Letter of Credit is automatically renewing, at least thirty (30) days prior to the maturity date of the Letter of Credit (or any replacement Letter of Credit), Tenant shall deliver to Landlord a replacement Letter of Credit which shall have a maturity date no earlier than the first day of the following Rent Year or one (1) year from its date of delivery to Landlord, whichever is later. In the event that the Extension Term Base Rent during any Extension Term is greater than Base Rent during the previous term, the face amount of the Letter of Credit shall be proportionately increased.

(b) So long as (i) there have not been two (2) or more Events of Default as of the applicable date of the reduction, (ii) there is no Monetary Default as of the applicable date of the reduction and (iii) there is no material adverse change in Tenant's net worth as of the applicable date of the reduction as verified by Landlord based upon a certificate from Tenant's chief financial officer and audited financials, then the Cash Security Deposit, or the face amount of the Letter of Credit, as the case may be, may be reduced by Tenant to (a) $212,500.00 at the commencement of the Second Rent Year, (b) $170,000 at the commencement of the third Rent Year, and (c) $127,500 at the commencement of the fourth Rent Year. Landlord shall, at no cost to Landlord, cooperate with Tenant and the issuer of the Letter of Credit in connection with any such reduction of the Letter of Credit, if applicable.

7.2 Application of Proceeds of Letter of Credit. Upon an Event of Default, or if any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganizations, arrangements, compositions or other relief from creditors (and, in the case of any proceeding instituted against it, if Tenant shall fail to have such proceedings dismissed within thirty (30) days) or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding, or upon the end of the Term if there remains any uncured default of which Tenant shall have received notice, Landlord at its sole option may draw down all or a part of the Letter of Credit. The balance of any Letter of Credit cash proceeds shall be held in accordance with Section 7.5 below. Should the entire Letter of Credit, or any portion thereof, be drawn down by Landlord, Tenant shall, upon the written demand of Landlord, deliver a replacement Letter of Credit in the amount drawn, and Tenant's failure to do so within ten (10) days after receipt of such written demand shall constitute an additional Event of Default hereunder. The application of all or any part of the cash proceeds of the Letter of Credit to any obligation or default of Tenant under this Lease shall not deprive Landlord of any other rights or remedies Landlord may have nor shall such application by Landlord constitute a waiver by Landlord.

7.3 Transfer of Letter of Credit. In the event that Landlord transfers its interest in the Premises, Tenant shall upon notice from and at no cost to Landlord, deliver to Landlord an amendment to the Letter of Credit or a replacement Letter of Credit naming Landlord's successor as the beneficiary thereof. If Tenant fails to deliver such amendment or replacement within ten (10) days after written notice from Landlord, Landlord shall have the right to draw down the entire amount of the Letter of Credit and hold the proceeds thereof in accordance with Section 7.5 below.

7.4 Credit of Issuer of Letter of Credit. In event of a material adverse change in the financial position of any bank or institution which has issued the Letter of Credit or any replacement Letter of Credit hereunder, Landlord reserves the right to require that Tenant change

the issuing bank or institution to another bank or institution reasonably approved by Landlord. Tenant shall, within ten (10) days after receipt of written notice from Landlord, which notice shall include the basis for Landlord's reasonable belief that there has been a material adverse change in the financial position of the issuer of the Letter of Credit, replace the then-outstanding letter of credit with a like Letter of Credit from another bank or institution approved by Landlord.

7.5 Security Deposit. Landlord shall hold the Cash Security Deposit and/or the balance of proceeds remaining after a draw on the Letter of Credit (each hereinafter referred to as the "**Security Deposit**") as security for Tenant's performance of all its Lease obligations. After an Event of Default, or upon the end of the Term if there remains any uncured default of which Tenant shall have received notice, Landlord may apply the Security Deposit, or any part thereof, to Landlord's damages without prejudice to any other Landlord remedy. Should Landlord apply all or any portion of the Security Deposit in accordance with the terms of this Lease, Tenant shall, upon the written demand of Landlord, deliver cash in the amount applied, and Tenant's failure to do so within twenty (20) days after receipt of such written demand shall constitute an additional Event of Default hereunder. Tenant shall have the right to deliver a replacement Letter of Credit in the form and amount required hereunder, and upon receipt of such replacement Letter of Credit, Landlord shall return the Security Deposit to Tenant. Landlord has no obligation to pay interest on the Security Deposit and may co-mingle the Security Deposit with Landlord's funds. If Landlord conveys its interest under this Lease, the Security Deposit, or any part not applied previously, may be turned over to the grantee in which case Tenant shall look solely to the grantee for the proper application and return of the Security Deposit.

7.6 Return of Security Deposit or Letter of Credit. Should Tenant comply with all of such terms, covenants and conditions and promptly pay all sums payable by Tenant to Landlord hereunder, the Security Deposit and/or Letter of Credit or the remaining proceeds therefrom, as applicable, shall be returned to Tenant within sixty (60) days after the end of the Term, less any portion thereof which may have been utilized by Landlord to cure any default or applied to any actual damage suffered by Landlord.

8. INTENTIONALLY OMITTED.

9. UTILITIES, HVAC; WASTE.

9.1 Electricity.

(a) Charges. Prior to the Term Commencement Date applicable to the Final Phase, Landlord shall have installed metering equipment to measure electricity furnished to the Premises. Commencing on the applicable Term Commencement Date, Tenant shall pay all charges for electricity furnished to the applicable Phase of the Premises and/or any equipment exclusively serving the same as additional rent, based on Landlord's reasonable estimates and/or any applicable metering equipment. At Tenant's request, Landlord shall provide Tenant with reasonable back-up documentation regarding the total charges and the method of allocating the charges to Tenant. Landlord shall, at Tenant's sole cost and expense, maintain and keep in good order, condition and repair any metering equipment. Tenant shall pay the full amount of any charges attributable to such meter on or before the due date therefor either directly to the supplier thereof.

(b) Additional Electricity Requirements. If Tenant shall subsequently require electric current for use in the Premises in excess of 12 watts per square foot and if, in Landlord's reasonable judgment, (i) Landlord's facilities are inadequate for such excess requirements, or (ii) such excess use shall result in an additional burden on the Building air conditioning systems and additional cost to Landlord on account thereof then, as the case may be, Landlord, upon written request and at the sole cost and expense of Tenant, may furnish and install such additional wire, conduits, feeders, switchboards and appurtenances as reasonably may be required to supply such additional requirements of Tenant if current therefor is available to Landlord, provided that the same (v) shall be permitted by Legal Requirements and insurance regulations, (w) shall not cause damage to the Building or the Premises, (x) shall not cause or create a dangerous or hazardous condition, (y) shall not entail excessive or unreasonable alterations or repairs, and (z) shall not interfere with or disturb other tenants or occupants of the Building. Tenant shall reimburse Landlord for such additional cost within ten (10) days of demand therefor.

9.2 Water. Prior to the Term Commencement Date applicable to the Final Phase, Landlord shall have installed metering equipment to measure water furnished to the Premises. Commencing on the Term Commencement Date for the First Phase, Tenant shall pay all charges for water furnished to the First Phase and/or any equipment exclusively serving the same as additional rent, based on Landlord's reasonable estimates or any applicable metering equipment. Prior to the Term Commencement Date for the Final Phase, metering equipment to measure water furnished to the Premises and any equipment exclusively serving the same shall have been installed. Landlord, at Tenant's expense, shall maintain and keep in good repair and condition such water meter equipment. Tenant shall pay the full amount of any charges attributable to such meter(s) on or before the due date therefor directly to the supplier thereof.

9.3 Gas. Prior to the Term Commencement Date applicable to the Final Phase, Landlord shall have installed metering equipment to measure gas furnished to the Premises. Commencing on the Term Commencement Date for the First Phase, Tenant shall pay all charges for gas furnished to the First Phase and/or any equipment exclusively serving the same as additional rent, based on Landlord's reasonable estimates or any applicable metering equipment. Prior to the Term Commencement Date for the Final Phase, metering equipment to measure natural gas furnished to the Premises and any equipment exclusively serving the same shall have been installed. Landlord, at Tenant's expense, shall maintain and keep in good repair and condition such gas meter equipment. Tenant shall pay the full amount of any charges attributable to such meter(s) on or before the due date therefor directly to the supplier thereof.

9.4 HVAC.

(a) General. Landlord shall furnish hot water to the Premises twenty-four (24) hours per day, seven (7) days per week for use in connection with Tenant's heating equipment. Landlord shall furnish to and distribute in the Premises chilled water for use in connection with Tenant's air conditioning equipment during normal business hours. Whenever the air conditioning systems are in operation, Tenant agrees to use reasonable efforts to lower

and close the blinds or drapes when necessary because of the sun's position, and to cooperate fully with Landlord with regard to, and to abide by all the reasonable regulations and requirements which Landlord may prescribe for the proper functioning and protection of the air conditioning systems.

(b) Additional Requirements. In the event Tenant requires additional air conditioning for equipment, business machines, meeting rooms or other special purposes, or because of occupancy, then any additional air conditioning units, chillers, condensers, compressors, ducts, piping and other equipment may be installed by Landlord or, at Landlord's election, by Tenant with Landlord's supervision, in either case at Tenant's sole cost and expense, but only if, in Landlord's reasonable judgment, the same will not (i) cause damage or injury to the Building, (ii) create a dangerous or hazardous condition, (iii) entail excessive or unreasonable alterations, repairs or expense or (iv) interfere with or disturb other tenants. Tenant shall reimburse Landlord, as additional rent hereunder, for the cost incurred by Landlord in installing, maintaining and operating such additional air conditioning equipment and the charges for all utilities consumed thereby.

9.5 Other Utilities; Utility Information. Subject to Landlord's reasonable rules and regulations governing the same, Tenant shall obtain and pay, as and when due, for all other utilities and services consumed in and/or furnished to the Premises, together with all taxes, penalties, surcharges and maintenance charges pertaining thereto. Within ten (10) business days after Landlord's request from time to time, Tenant shall provide Landlord with reasonably detailed information regarding tenant's utility usage in the Premises.

9.6 Interruption or Curtailment of Utilities.

(a) When necessary by reason of accident or emergency, or for repairs, alterations, replacements or improvements which in the reasonable judgment of Landlord are desirable or necessary to be made, Landlord reserves the right, upon as much prior notice to Tenant as is practicable under the circumstances and no less than twenty-four (24) hours' notice except in the event of an emergency, to interrupt, curtail, or stop (i) the furnishing of hot and/or cold water, and (ii) the operation of the plumbing and electric systems. Landlord shall exercise reasonable diligence to eliminate the cause of any such interruption, curtailment, stoppage or suspension, but, subject to Section 9.6(b) below, there shall be no diminution or abatement of Rent or other compensation due from Landlord to Tenant hereunder, nor shall this Lease be affected or any of Tenant's obligations hereunder reduced, and Landlord shall have no responsibility or liability for any such interruption, curtailment, stoppage, or suspension of services or systems.

(b) Notwithstanding anything to the contrary in this Lease contained, if the Premises shall lack any service which Landlord is required to provide hereunder, or if Tenant's use and occupancy of the Premises or any part thereof shall be disturbed in violation of Section 24 hereof (thereby rendering the Premises or a portion thereof substantially untenantable) such that, for the duration of the Landlord Service Interruption Cure Period (hereinafter defined), the continued operation in the ordinary course of Tenant's business in any portion of the Premises is materially and adversely affected, and if Tenant ceases to use the affected portion of the Premises (the "**Affected Portion**") during the period of untenantability as

the direct result of such lack of service or disturbance, then, provided that Tenant ceases to use the Affected Portion during the entirety of the Landlord Service Interruption Cure Period and that such untenantability and Landlord's inability to cure such condition is not caused by the fault or neglect of any of the Tenant Parties, Base Rent shall thereafter be abated in proportion to such untenantability until the day such condition is completely corrected. For purposes hereof, the "**Landlord Service Interruption Cure Period**" shall be defined as five (5) consecutive business days after Landlord's receipt of written notice from Tenant of the condition causing untenantability in the Affected Portion. The provisions of this Section 9.6(b) shall not apply in the event of untenantability caused by causes beyond Landlord's control or if Landlord is unable to cure such condition as the result of causes beyond Landlord's control.

9.7 Telecommunications Providers. Notwithstanding anything to the contrary herein or in this Lease contained, Landlord has no obligation to allow any particular telecommunications service provider to have access to the Building or to Premises other than Verizon (the "**Approved Provider**"). If Landlord permits such access, Landlord may condition such access upon (a) the execution of Landlord's standard telecommunications agreement (which shall include a provision requiring the payment of fair market rent for any space in the Property dedicated, licensed and/or leased to such provider), and (b) the payment to Landlord by Tenant or the service provider of any costs incurred by Landlord in facilitating such access. Subject to the preceding sentence, Landlord's consent to providing access to the Building to any service provider other than the Approved Provider shall not be unreasonably withheld, conditioned or delayed provided such access does not require any street opening permits or approvals (unless otherwise agreed to by the City of Cambridge) or would unreasonably interfere with the use of the Common Areas.

9.8 Landlord's Services. Subject to reimbursement pursuant to Section 5.2 above, Landlord shall provide the services described in Exhibit 8 attached hereto and made a part hereof ("**Landlord's Services**").

10. MAINTENANCE AND REPAIRS.

10.1 Maintenance and Repairs by Tenant.

(a) Tenant shall keep all and singular the Premises (including, without limitation, doors and door frames and plate glass (provided that Landlord shall have the right to repair and/or replace, as necessary, plate glass at Tenant's cost)), neat and clean and free of insects, rodents, vermin and other pests and in such good repair, order and condition as the same are in on the applicable Term Commencement Date or in such better condition as the Premises may be put in during the Term, reasonable wear and tear and damage by insured Casualty excepted. Tenant shall be solely responsible, at Tenant's sole cost and expense, for the proper maintenance of all building systems, sanitary, electrical, heating, air conditioning, plumbing, security or other systems and of all equipment and appliances installed and/or operated by Tenant and/or exclusively serving the Premises. Tenant agrees to provide regular maintenance by contract with a reputable qualified service contractor for the heating and air conditioning equipment servicing the Premises. Such maintenance contract and contractor shall be subject to Landlord's reasonable approval. Tenant, at Landlord's request, shall at reasonable intervals provide Landlord with copies of such contracts and maintenance and repair records and/or reports.

(b) In the event that Tenant is required, pursuant to Section 10.1(a) to replace a capital item that will remain in the Premises after the expiration of the Term and the useful life of such replacement will extend beyond the expiration of the Term, then, so long as there is no Event of Default uncured as of the expiration of the Term, Landlord shall, within thirty (30) days after the later to occur of (i) the expiration of the Term, and (ii) Landlord's receipt of a reasonably detailed invoice reflecting the cost of the capital item and Tenant's good-faith determination of its useful life (determined in accordance with sound accounting principles consistently applied), pay to Tenant an amount equal to the unamortized cost of such capital item (calculated as of the last day of the Term with no interest), less any amounts then due and owing by Tenant to Landlord.

10.2 Maintenance and Repairs by Landlord. Except as otherwise provided in Section 15, and subject to Tenant's obligations in Section 10.1 above, Landlord shall keep and maintain the roof, Building structure, exterior window frames, structural floor slabs and columns in good repair, order and condition. In addition, Landlord shall operate and maintain the Common Areas in substantially the same manner as other first-class combination office and laboratory facilities in the East Cambridge/Kendall Square area.

10.3 Accidents to Sanitary and Other Systems. Tenant shall give to Landlord prompt notice of any fire or accident in the Premises or in the Building and of any damage to, or defective condition in, any part or appurtenance of the Building including, without limitation, sanitary, electrical, ventilation, heating and air conditioning or other systems located in, or passing through, the Premises. Except as otherwise provided in Section 15, and subject to Tenant's obligations in Section 10.1 above, such damage or defective condition shall be remedied by Landlord with reasonable diligence, but, subject to Section 14.5 below, if such damage or defective condition was caused by any of the Tenant Parties, the cost to remedy the same shall be paid by Tenant.

10.4 Floor Load – Heavy Equipment. Tenant shall not place a load upon any floor of the Premises exceeding the floor load per square foot of area which such floor was designed to carry and which is allowed by Legal Requirements. Landlord reserves the right to prescribe the weight and position of all safes, heavy machinery, heavy equipment, freight, bulky matter or fixtures (collectively, "**Heavy Equipment**"), which shall be placed so as to distribute the weight. Heavy Equipment shall be placed and maintained by Tenant at Tenant's expense in settings sufficient in Landlord's reasonable judgment to absorb and prevent vibration, noise and annoyance. Tenant shall not move any Heavy Equipment into or out of the Building without giving Landlord prior written notice thereof and observing all of Landlord's Rules and Regulations with respect to the same. If such Heavy Equipment requires special handling, Tenant agrees to employ only persons holding a Master Rigger's License to do said work, and that all work in connection therewith shall comply with Legal Requirements. Any such moving shall be at the sole risk and hazard of Tenant and Tenant will defend, indemnify and save Landlord and Landlord's agents (including without limitation its property manager), contractors and employees (collectively with Landlord, the "**Landlord Parties**") harmless from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including without

limitation reasonable legal fees) (collectively, "**Claims**") resulting directly or indirectly from such moving. Proper placement of all Heavy Equipment in the Premises shall be Tenant's responsibility.

11. ALTERATIONS AND IMPROVEMENTS BY TENANT.

11.1 Landlord's Consent Required. Tenant shall not make any alterations, decorations, installations, removals, additions or improvements (collectively, "**Alterations**") in or to the Premises without Landlord's prior written approval of the contractor(s), written plans and specifications, a time schedule therefor and the items listed in Exhibit 5 attached hereto and made a part hereof. Landlord reserves the right to require that Tenant use Landlord's preferred vendor(s) for any Alterations that involve roof penetrations, alarm tie-ins, sprinklers, fire alarm and other life safety equipment. Tenant shall not make any amendments or additions to plans and specifications approved by Landlord without Landlord's prior written consent. Landlord's approval of non-structural Alterations shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, Landlord may withhold its consent in its sole discretion (a) to any Alteration to or affecting the lab benches, fume hoods, roof and/or building systems, (b) with respect to matters of aesthetics relating to Alterations to or affecting the exterior of the Building, and (c) to any Alteration affecting the Building structure. Notwithstanding the foregoing, Landlord's consent shall not be required (but the applicable Exhibit 5 items shall be provided if reasonably required by Landlord) with respect to any Alterations that are purely decorative in nature ("**Decorative Alterations**") nor with respect to non-structural Alterations costing less than $25,000 in any one instance (and $75,000 in the aggregate per year) so long as such Alterations do not materially adversely affect the roof, Building systems or Building exterior (each, a "**Permitted Alteration**"), provided Tenant shall provide Landlord with reasonably detailed written notice thereof. No Alterations shall create a mix of the Permitted Uses in the Premises that is inconsistent with the design of the base Building. Tenant shall be responsible for all elements of the design of Tenant's plans (including, without limitation, compliance with Legal Requirements, functionality of design, the structural integrity of the design, the configuration of the Premises and the placement of Tenant's furniture, appliances and equipment), and Landlord's approval of Tenant's plans shall in no event relieve Tenant of the responsibility for such design. Landlord shall have no liability or responsibility for any claim, injury or damage alleged to have been caused by the particular materials (whether building standard or non-building standard), appliances or equipment selected by Tenant in connection with any work performed by or on behalf of Tenant. Except as otherwise expressly set forth herein, all Alterations shall be done at Tenant's sole cost and expense and at such times and in such manner as Landlord may from time to time reasonably designate. If Tenant shall make any Alterations, Landlord may elect, not later than the time of Landlord's approval thereof (or as soon as reasonably possible and in any event within thirty (30) days after receipt of reasonably detailed notice regarding any Permitted Alterations), to require Tenant at the expiration or sooner termination of the Term to remove such Alterations and restore the Premises to substantially the same condition as existed immediately prior to such Alterations. If Landlord does not timely elect to require such removal, then any such Alteration shall become part of the Premises upon installation, and shall be surrendered with the Premises at the end of the Term. Tenant shall provide Landlord with reproducible record drawings (in CAD format) of all Alterations other than Decorative Alterations within sixty (60) days after completion thereof. Subject to the terms and conditions set forth in this Article 11, Tenant shall have the right to install and maintain a card access system in the Premises.

11.2 Supervised Work. Landlord and Tenant recognize that to the extent Landlord permits Tenant to perform any Alterations outside the Premises and/or affecting the Building systems, or if required by Legal Requirements, Landlord will need to make arrangements to have supervisory personnel on site. Accordingly, Landlord and Tenant agree as follows: Tenant shall give Landlord at least two (2) business days' prior written notice of any time outside of normal construction hours when Tenant intends to perform portions of Alterations (the "**Supervised Work**"). Tenant shall reimburse Landlord, within thirty (30) days after demand therefor, for the reasonable out-of-pocket cost of Landlord's supervisory personnel overseeing the Supervised Work.

11.3 Harmonious Relations. Tenant agrees that it will not, either directly or indirectly, use any contractors and/or materials if their use will create any difficulty, whether in the nature of a labor dispute or otherwise, with other contractors and/or labor engaged by Tenant or Landlord or others in the construction, maintenance and/or operation of the Building, the Property or any part thereof. In the event of any such difficulty, upon Landlord's request, Tenant shall cause all contractors, mechanics or laborers causing such difficulty to leave the Property immediately.

11.4 Liens. No Alterations shall be undertaken by Tenant until Tenant has made provision for written waiver of liens from all contractors for such Alteration and taken other appropriate protective measures approved and/or required by Landlord. If the cost of such Alteration exceeds $50,000, then Tenant shall either: (a) demonstrate to Landlord, to Landlord's reasonable satisfaction, that Tenant is able to pay for the cost of such Alteration, or (b) provide to Landlord security, in form and amount reasonably satisfactory to Landlord (such as a letter of credit, escrowed funds, payment, performance and lien bonds or a guaranty), securing Tenant's obligation to pay for the entire cost of such Alteration. Any mechanic's lien filed against the Premises or the Building for work claimed to have been done for, or materials claimed to have been furnished to, Tenant shall be discharged by Tenant within ten (10) days thereafter, at Tenant's expense by filing the bond required by law or otherwise.

11.5 General Requirements. Unless Landlord and Tenant otherwise agree in writing, Tenant shall (a) procure or cause others to procure on its behalf all necessary permits before undertaking any Alterations in the Premises (and provide copies thereof to Landlord); (b) perform all of such Alterations in a good and workmanlike manner, employing materials of good quality and in compliance with Landlord's construction rules and regulations, all insurance requirements of this Lease, and Legal Requirements; and (c) defend, indemnify and hold the Landlord Parties harmless from and against any and all Claims occasioned by or growing out of such Alterations except to the extent caused by the negligence or willful misconduct of any of the Landlord Parties. Tenant shall cause contractors employed by Tenant to (i) carry Worker's Compensation Insurance in accordance with statutory requirements, (ii) carry Automobile Liability Insurance and Commercial General Liability Insurance (A) naming Landlord as an additional insured, and (B) covering such contractors on or about the Premises in the amounts stated in Section 14 hereof or in such other reasonable amounts as Landlord shall require, and (iii) submit binders evidencing such coverage to Landlord prior to the commencement of any

such Alterations. In addition, if construction during normal business hours unreasonably disturbs other tenants of the Property, in Landlord's sole discretion, Landlord may require Tenant to stop the performance of Alterations during normal business hours and to perform the same after hours.

12. SIGNAGE.

12.1 Restrictions. Subject to Section 12.3 below, Tenant shall not place or suffer to be placed or maintained on the exterior of the Premises, or any part of the interior visible from the exterior thereof, any sign, banner, advertising matter or any other thing of any kind (including, without limitation, any hand-lettered advertising), and shall not place or maintain any decoration, letter or advertising matter on the glass of any window or door of the Premises without first obtaining Landlord's written approval. No signs or blinds may be put on or in any window or elsewhere if visible from the exterior of the Building. Tenant may not remove the building standard blinds without Landlord's prior written consent. Tenant may hang its own drapes, provided that they shall not in any way interfere with any building standard drapery or blinds provided by Landlord or be visible from the exterior of the Building, and that such drapes are so hung and installed that, when drawn, the building standard drapery or blinds are automatically also drawn.

12.2 Building Directory. Landlord shall list Tenant within the directory in the Building lobby at Landlord's sole cost and expense. Subject to reasonable limits on the number of lines on the directory Landlord can provide and all such additional signage in the lobby directory, Landlord shall add the names of any approved subtenants or licensees occupying any portion of the Premises at Tenant's sole cost and expense.

12.3 Exterior Signage. Provided that and for so long as Tenant is then occupying at least twenty-five percent (25%) of the rentable square feet of the Building, Tenant shall have the right to erect and maintain one (1) sign on the exterior of the Building listing no other entity or person other than Tenant (the "**Exterior Signage**"), provided (i) the Exterior Signage complies with all Legal Requirements as-of-right (and Tenant shall have obtained any necessary permits prior to erecting the Exterior Signage), (ii) the location of the Exterior Signage shall be subject to Landlord's reasonable approval, (iii) the size, materials, design, lighting and method of installation of the Exterior Signage, and any requested changes thereto, shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed, and (iv) Tenant shall at all times maintain the Exterior Signage in good order, condition and repair and shall remove the Exterior Signage at the expiration or earlier termination of the term hereof or upon Landlord's written demand after the failure of Tenant to comply with the provisions of this Section 12.3, and shall repair any damage to the Building caused by the Exterior Signage or the installation or removal thereof. Tenant shall have the right, from time to time throughout the term of this Lease, to replace its signage (if any) with signage which is equivalent to the signage being replaced, subject to all of the terms and conditions of this Section 12.3.

13. ASSIGNMENT, MORTGAGING AND SUBLETTING.

13.1 Landlord's Consent Required. Tenant shall not, without Landlord's prior written consent, which consent may be withheld in Landlord's sole discretion, mortgage or otherwise encumber this Lease or the Premises in whole or in part. Except as expressly otherwise set forth herein, Tenant shall not, without Landlord's prior written consent, assign, sublet, license or transfer this Lease or the Premises in whole or in part whether by operation of law or otherwise, or at one time or at intervals, or permit the occupancy of all or any portion of the Premises by any person or entity other than Tenant's employees (each of the foregoing, a "**Transfer**"). Any purported Transfer made without Landlord's consent, if required hereunder, shall be void and confer no rights upon any third person, provided that if there is a Transfer, Landlord may collect rent from the transferee without waiving the prohibition against Transfers, accepting the transferee, or releasing Tenant from full performance under this Lease. In the event of any Transfer in violation of this Section 13, Landlord shall have the right to terminate this Lease upon thirty (30) days' written notice to Tenant given within sixty (60) days after receipt of written notice from Tenant to Landlord of any Transfer, or within one (1) year after Landlord first learns of the Transfer if no notice is given. No Transfer shall relieve Tenant of its primary obligation as party Tenant hereunder, nor shall it reduce or increase Landlord's obligations under this Lease.

13.2 Landlord's Recapture Right.

(a) Subject to Section 13.7 below, Tenant shall, prior to offering or advertising fifty percent (50%) or more of the Premises for a Transfer for the balance of the Term, give a written notice (the "**Recapture Notice**") to Landlord which: (i) states that Tenant desires to make a Transfer, (ii) identifies the affected portion of the Premises (the "**Recapture Premises**"), and offers to Landlord to terminate this Lease with respect to the Recapture Premises. Landlord shall have fifteen (15) business days within which to respond to the Recapture Notice.

(b) If Tenant does not enter into a Transfer on substantially the same terms and conditions as contained in the Recapture Notice on or before the date which is one hundred eighty (180) days after the earlier of: (x) the expiration of the 15-business day period specified in Section 13.2(a) above, or (y) the date that Landlord notifies Tenant that Landlord will not accept Tenant's offer contained in the Recapture Notice, time being of the essence, then prior to entering into any Transfer after such 180-day period, Tenant must deliver to Landlord a new Recapture Notice in accordance with Section 13.2(a) above.

(c) Notwithstanding anything to the contrary contained herein, if Landlord notifies Tenant that it accepts the offer contained in the Recapture Notice or any subsequent Recapture Notice, Tenant shall have the right, for a period of fifteen (15) days following receipt of such notice from Landlord, time being of the essence, to notify Landlord in writing that it wishes to withdraw such offer and this Lease shall continue in full force and effect.

13.3 Standard of Consent to Transfer. If Landlord does not timely give written notice to Tenant accepting a Recapture Offer or declines to accept the same, then Landlord agrees that, subject to the provisions of this Section 13, Landlord shall not unreasonably withhold, condition

or delay its consent to a Transfer on the terms contained in the Recapture Notice to an entity which will use the Premises for the Permitted Uses and, in Landlord's reasonable opinion: (a) has a tangible net worth and other financial indicators sufficient to meet the Transferee's obligations under the Transfer instrument in question; (b) has a business reputation compatible with the operation of a first-class combination laboratory, research, development and office building; and (c) the intended use of such entity does not violate any exclusive or restrictive use provisions of any leases then in effect with respect to space in the Property; provided, however, if there shall be, at the time that Landlord is otherwise required to provide its consent, an event which, with the passage of time and/or the giving of notice, would constitute an Event of Default, then it shall be reasonable for Landlord to condition its consent to the Transfer in question on Tenant's cure of such default prior to the expiration of applicable cure periods set forth in Section 20.1.

13.4 Listing Confers no Rights. The listing of any name other than that of Tenant, whether on the doors of the Premises or on the Building directory, or otherwise, shall not operate to vest in any such other person, firm or corporation any right or interest in this Lease or in the Premises or be deemed to effect or evidence any consent of Landlord, it being expressly understood that any such listing is a privilege extended by Landlord revocable at will by written notice to Tenant.

13.5 Profits In Connection with Transfers. Excluding any assignment(s) of this Lease to a Successor, Tenant shall, within thirty (30) days of receipt thereof, pay to Landlord fifty percent (50%) of any rent, sum or other consideration to be paid or given in connection with any Transfer, either initially or over time, after deducting reasonable actual out-of-pocket legal, and brokerage expenses incurred by Tenant and unamortized improvements paid for by Tenant in connection therewith, in excess of Rent hereunder as if such amount were originally called for by the terms of this Lease as additional rent.

13.6 Prohibited Transfers. Notwithstanding any contrary provision of this Lease, Tenant shall have no right to make a Transfer unless on both (i) the date on which Tenant notifies Landlord of its intention to enter into a Transfer and (ii) the date on which such Transfer is to take effect, there is not an Event of Default. Notwithstanding anything to the contrary contained herein, Tenant agrees that in no event shall Tenant make a Transfer to (a) any government agency; (b) any tenant, subtenant or occupant of other space in the Building; or (c) any entity with whom Landlord shall have negotiated for space in the Property in the six (6) months immediately preceding such proposed Transfer.

13.7 Exceptions to Requirement for Consent. Notwithstanding anything to the contrary herein contained, Tenant shall have the right, without obtaining Landlord's consent and without giving Landlord a Recapture Notice, to make a Transfer to (a) an Affiliated Entity (hereinafter defined) so long as such entity remains in such relationship to Tenant, and (b) a Successor, provided that prior to or simultaneously with any such Transfer, such Affiliated Entity or Successor, as the case may be, and Tenant execute and deliver to Landlord an assignment and assumption agreement in form and substance reasonably acceptable to Landlord whereby such Affiliated Entity or Successor, as the case may be, shall agree to be independently bound by and upon all the covenants, agreements, terms, provisions and conditions set forth in the Lease on the part of Tenant to be performed, and whereby such Affiliated Entity or

Successor, as the case may be, shall expressly agree that the provisions of this Section 13 shall, notwithstanding such Transfer, continue to be binding upon it with respect to all future Transfers. For the purposes hereof, an "**Affiliated Entity**" shall be defined as any entity (a) that has a net worth and other financial indicators demonstrating such entity's ability to perform all of Tenant's obligations hereunder, as evidenced by audited financial statements; and (b) which is controlled by, is under common control with, or which controls Tenant. For the purposes hereof, a "**Successor**" shall be defined as any entity into or with which Tenant is merged or with which Tenant is consolidated or which acquires all or substantially all of Tenant's stock or assets, provided that the surviving entity shall have a net worth no less than Tenant prior to such transaction. Notwithstanding the provisions of this Section 13.7, no transaction or series of transactions which are effected solely for the purpose of qualifying as a transaction which does not require Landlord's consent (i.e. and thereby avoiding the operation of the provisions of this Article 13) shall be permitted pursuant to this Section 13.7.

13.8 Investment Policies. Notwithstanding anything to the contrary contained herein, Tenant may not enter into any Transfer with any person or entity if the identity of such person or entity is inconsistent with the written investment policies of Landlord and/or Landlord's parent as provided to Tenant by Landlord prior to Landlord's receipt of Tenant's notice of such proposed Transfer, and any such Transfer shall be void ab initio. The provisions of this Section 13.8 shall apply to all Transferees, including without limitation, Affiliated Entities, Successors and Participating Companies. Notwithstanding the foregoing, the provisions of this Section 13.8 shall be of no further force and effect if Landlord and/or Fee Owner are no longer affiliates of Massachusetts Institute of Technology.

14. INSURANCE; INDEMNIFICATION; EXCULPATION.

14.1 Tenant's Insurance.

(a) Tenant shall procure, pay for and keep in force throughout the Term (and for so long thereafter as Tenant remains in occupancy of the Premises) commercial general liability insurance insuring Tenant on an occurrence basis against all claims and demands for personal injury liability (including, without limitation, bodily injury, sickness, disease, and death) or damage to property which may be claimed to have occurred from and after the time any of the Tenant Parties shall first enter the Premises, of not less than One Million Dollars ($1,000,000) per occurrence and Two Million Dollars ($2,000,000) annual aggregate, and from time to time thereafter shall be not less than such higher amounts, if procurable, as may be reasonably required by Landlord. Tenant shall also carry umbrella liability coverage in an amount of no less than Eight Million Dollars ($8,000,000). Such policy shall also include contractual liability coverage covering Tenant's liability assumed under this Lease, including without limitation Tenant's indemnification obligations. Such insurance policy(ies) shall name Landlord, Landlord's managing agent and persons claiming by, through or under them, if any, as additional insureds.

(b) Tenant shall take out and maintain throughout the Term a policy of fire, vandalism, malicious mischief, extended coverage and so-called "all risk" coverage insurance in an amount equal to one hundred percent (100%) of the replacement cost insuring (i) all items or components of Alterations (collectively, the "**Tenant-Insured Improvements**"), and

(ii) Tenant's furniture, equipment, fixtures and property of every kind, nature and description related or arising out of Tenant's leasehold estate hereunder, which may be in or upon the Premises or the Building (collectively, "**Tenant's Property**"). Such insurance shall insure the interests of both Landlord and Tenant as their respective interests may appear from time to time.

(c) Tenant shall take out and maintain a policy of business interruption insurance throughout the Term sufficient to cover at least twelve (12) months of Rent due hereunder and Tenant's business losses during such 12-month period.

(d) Tenant shall procure and maintain at its sole expense such additional insurance as may be necessary to comply with any Legal Requirements.

(e) During periods when any Alterations are being performed, Builders Risk Insurance.

(f) The insurance required pursuant to Sections 14.1(a), (b), (c), (d) and (e) (collectively, "**Tenant's Insurance Policies**") shall be effected with insurers approved by Landlord, with a rating of not less than "A-VII" in the current Best's Insurance Reports, and authorized to do business in the Commonwealth of Massachusetts under valid and enforceable policies. Tenant's Insurance Policies shall each provide that it shall not be canceled or modified without at least thirty (30) days' prior written notice to each insured named therein. Tenant's Insurance Policies may include deductibles in an amount no greater than the greater of $25,000 or commercially reasonable amounts. On or before the date on which any of the Tenant Parties shall first enter the Premises and thereafter not less than fifteen (15) days prior to the expiration date of each expiring policy, Tenant shall deliver to Landlord binders of Tenant's Insurance Policies issued by the respective insurers setting forth in full the provisions thereof together with evidence satisfactory to Landlord of the payment of all premiums for such policies. In the event of any claim, and upon Landlord's request, Tenant shall deliver to Landlord complete copies of Tenant's Insurance Policies. Upon request of Landlord, Tenant shall deliver to any Mortgagee copies of the foregoing documents.

14.2 Indemnification.

(a) Except to the extent caused by the negligence or willful misconduct of any of the Landlord Parties, Tenant shall defend, indemnify and save the Landlord Parties harmless from and against any and all Claims asserted by or on behalf of any person, firm, corporation or public authority arising from:

(i) Tenant's breach of any covenant or obligation under this Lease;

(ii) Any injury to or death of any person, or loss of or damage to property, sustained or occurring in, upon, at or about the Premises;

(iii) Any injury to or death of any person, or loss of or damage to property arising out of the use or occupancy of the Premises by or the negligence or willful misconduct of any of the Tenant Parties; and

(iv) On account of or based upon any work or thing whatsoever done (other than by Landlord or any of the Landlord Parties) at the Premises during the Term and during the period of time, if any, prior to the applicable Term Commencement Date that any of the Tenant Parties may have been given access to the applicable Phase of the Premises.

(b) Except to the extent caused by the negligence or willful misconduct of any of the Tenant Parties, Landlord shall defend, indemnify and save Tenant harmless from and against any and all Claims asserted by or on behalf of any person, firm, corporation or public authority arising from (i) Landlord's breach of any covenant or obligation under this Lease, or (ii) any injury to or death of any person, or loss of or damage to property arising out of the negligence or willful misconduct of any of the Landlord Parties.

14.3 Property of Tenant. Tenant covenants and agrees that, to the maximum extent permitted by Legal Requirements, all of Tenant's Property at the Premises shall be at the sole risk and hazard of Tenant, and that if the whole or any part thereof shall be damaged, destroyed, stolen or removed from any cause or reason whatsoever, no part of said damage or loss shall be charged to, or borne by, Landlord, except, subject to Section 14.5 hereof, to the extent such damage or loss is due to the negligence or willful misconduct of any of the Landlord Parties.

14.4 Limitation of Landlord's Liability for Damage or Injury. Landlord shall not be liable for any injury or damage to persons, animals, or property resulting from fire, explosion, falling plaster, steam, gas, air contaminants or emissions, electricity, electrical or electronic emanations or disturbance, water, rain or snow or leaks from any part of the Building or from the pipes, appliances, equipment or plumbing works or from the roof, street or sub-surface or from any other place or caused by dampness, vandalism, malicious mischief or by any other cause of whatever nature, except to the extent caused by or due to the negligence or willful misconduct of any of the Landlord Parties, and then, where notice and an opportunity to cure are appropriate (i.e., where Tenant has an opportunity to know or should have known of such condition sufficiently in advance of the occurrence of any such injury or damage resulting therefrom as would have enabled Landlord to prevent such damage or loss had Tenant notified Landlord of such condition) only after (i) notice to Landlord of the condition claimed to constitute negligence or willful misconduct, and (ii) the expiration of a reasonable time after such notice has been received by Landlord without Landlord having commenced to take all reasonable and practicable means to cure or correct such condition; and pending such cure or correction by Landlord, Tenant shall take all reasonably prudent temporary measures and safeguards to prevent any injury, loss or damage to persons or property. Notwithstanding the foregoing, in no event shall any of the Landlord Parties be liable for any loss which is covered by insurance policies actually carried or required to be so carried by this Lease; nor shall any of the Landlord Parties be liable for any such damage caused by other tenants or persons in the Building or caused by operations in construction of any private, public, or quasi-public work; nor shall any of the Landlord Parties be liable for any latent defect in the Premises or in the Building.

14.5 Waiver of Subrogation; Mutual Release. Landlord and Tenant each hereby waives on behalf of itself and its property insurers (none of which shall ever be assigned any such claim or be entitled thereto due to subrogation or otherwise) any and all rights of recovery, claim, action, or cause of action against the other and its agents, officers, servants, partners,

shareholders, or employees (collectively, the "**Related Parties**") for any loss or damage (excluding rights of recovery, claims, actions, and causes of action relating to damage to the roof of the Building caused by Tenant but including rights of recovery, claims, actions, and causes of action relating to damage to the roof of the Building caused by any Casualty (hereinafter defined)) that may occur to or within the Premises or the Building or any improvements thereto, or any personal property of such party therein which is insured against under any property insurance policy actually being maintained by the waiving party from time to time, even if not required hereunder, or which would be insured against under the terms of any insurance policy required to be carried or maintained by the waiving party hereunder, whether or not such insurance coverage is actually being maintained, including, in every instance, such loss or damage that may be caused by the negligence of the other party hereto and/or its Related Parties. Landlord and Tenant each agrees to cause appropriate clauses to be included in its property insurance policies necessary to implement the foregoing provisions.

14.6 Tenant's Acts – Effect on Insurance. Tenant shall not do or permit any Tenant Party to do any act or thing upon the Premises or elsewhere in the Building which will invalidate or be in conflict with any insurance policies or warranties covering the Building and the fixtures and property therein; and shall not do, or permit to be done, any act or thing upon the Premises which shall subject Landlord to any liability or responsibility for injury to any person or persons or to property by reason of any business or operation being carried on upon said Premises or for any other reason. If by reason of the failure of Tenant to comply with the provisions hereof the insurance rate applicable to any policy of insurance shall at any time thereafter be higher than it otherwise would be, Tenant shall reimburse Landlord upon demand for that part of any insurance premiums which shall have been charged because of such failure by Tenant, together with interest at the Default Rate until paid in full, within ten (10) days after receipt of an invoice therefor.

15. CASUALTY; TAKING.

15.1 Damage. If the Premises are damaged in whole or part because of fire or other insured casualty ("**Casualty**"), or if the Premises are subject to a taking in connection with the exercise of any power of eminent domain, condemnation, or purchase under threat or in lieu thereof (any of the foregoing, a "**Taking**"), then unless this Lease is terminated in accordance with Section 15.2 below, Landlord shall restore the Building and/or the Premises to substantially the same condition as existed immediately following completion of Landlord's Work, or in the event of a partial Taking which affects the Building and the Premises, restore the remainder of the Building and the Premises not so Taken to substantially the same condition as is reasonably feasible. If, in Landlord's reasonable judgment, any element of the Tenant-Insured Improvements can more effectively be restored as an integral part of Landlord's restoration of the Building or the Premises, such restoration shall also be made by Landlord, but at Tenant's sole cost and expense. Subject to rights of Mortgagees, Tenant Delays, Legal Requirements then in existence and to delays for adjustment of insurance proceeds or Taking awards, as the case may be, and instances of Landlord's Force Majeure, Landlord shall substantially complete such restoration within one (1) year after Landlord's receipt of all required permits therefor with respect to substantial reconstruction of at least 50% of the Building, or, within one hundred eighty (180) days after Landlord's receipt of all required permits therefor in the case of restoration of less than 50% of the Building. Landlord shall deliver to Tenant an estimated

construction schedule as soon as reasonably possible after the occurrence of the applicable Casualty or Taking. Upon substantial completion of such restoration by Landlord, Tenant shall use diligent efforts to complete restoration of the Premises to substantially the same condition as existed immediately prior to such Casualty or Taking, as the case may be, as soon as reasonably possible. Tenant agrees to cooperate with Landlord in such manner as Landlord may reasonably request to assist Landlord in collecting insurance proceeds due in connection with any Casualty which affects the Premises or the Building. In no event shall Landlord be required to expend more than the Net (hereinafter defined) insurance proceeds Landlord receives for damage to the Premises and/or the Building or the Net Taking award attributable to the Premises and/or the Building. "**Net**" means the insurance proceeds or Taking award actually paid to Landlord (and not paid over to a Mortgagee) less all costs and expenses, including adjusters and attorney's fees, of obtaining the same. In the Operating Year in which a Casualty occurs, there shall be included in Operating Costs Landlord's deductible under its property insurance policy. Except as Landlord may elect pursuant to this Section 15.1, under no circumstances shall Landlord be required to repair any damage to, or make any repairs to or replacements of, any Tenant-Insured Improvements.

15.2 Termination Rights.

(a) Landlord's Termination Rights. Landlord may terminate this Lease upon thirty (30) days' prior written notice to Tenant if:

(i) any material portion of the Building or any material means of access thereto is taken; or

(ii) more than thirty-five percent (35%) of the Building is damaged by Casualty.

(b) Tenant's Termination Right. If Landlord is so required but fails to complete restoration of the Premises within the time frames and subject to the conditions set forth in Section 15.1 above, then Tenant may terminate this Lease upon thirty (30) days' written notice to Landlord; provided, however, that if Landlord completes such restoration within thirty (30) days after receipt of any such termination notice, such termination notice shall be null and void and this Lease shall continue in full force and effect. The remedies set forth in this Section 15.2(b) and in Section 15.2(c) below are Tenant's sole and exclusive rights and remedies based upon Landlord's failure to complete the restoration of the Premises as set forth herein.

(c) Either Party May Terminate. In the case of any Casualty or Taking affecting the Premises and occurring during the last twelve (12) months of the Term, then (i) if such Casualty or Taking results in more than twenty-five percent (25%) of the floor area of the Premises being unsuitable for the Permitted Uses, or (ii) the damage to the Premises costs more than $100,000 to restore, then either Landlord or Tenant shall have the option to terminate this Lease upon thirty (30) days' written notice to the other. In addition, Landlord or Tenant may terminate this Lease by written notice to the other if (i) the estimated time to complete restoration exceeds one (1) year from the date on which Landlord receives all required permits for such restoration, or (ii) any Mortgagee does not release sufficient insurance proceeds to cover the cost of Landlord's restoration work and Landlord does not agree in writing to cover the difference.

(d) Automatic Termination. In the case of a Taking of the entire Premises, then this Lease shall automatically terminate as of the date of possession by the Taking authority.

(e) Notwithstanding anything to the contrary contained herein, Tenant may not terminate this Lease pursuant to this Section 15 if the Casualty in question was caused by the gross negligence or willful misconduct of any of the Tenant Parties.

15.3 Taking for Temporary Use. If the Premises are Taken for temporary use, this Lease and Tenant's obligations, including without limitation the payment of Rent but excluding those obligations incapable of performance in the absence of possession, shall continue. For purposes hereof, a "**Taking for temporary use**" shall mean a Taking of ninety (90) days or less.

15.4 Disposition of Awards. Except for (i) so much of the award for a Taking for temporary use of the Premises as is attributable to the Term, which shall belong to Tenant, and (ii) any separate award for Tenant's movable trade fixtures, relocation expenses, and unamortized leasehold improvements paid for by Tenant (provided that the same may not reduce Landlord's award), all Taking awards to Landlord or Tenant shall be Landlord's property without Tenant's participation, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant may pursue its own claim against the Taking authority.

16. ESTOPPEL CERTIFICATE. Tenant shall at any time and from time to time upon not less than ten (10) business days' prior notice from Landlord, execute, acknowledge and deliver to Landlord a statement in writing certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications), and the dates to which Rent has been paid in advance, if any, stating whether or not Landlord is in default in performance of any covenant, agreement, term, provision or condition contained in this Lease and, if so, specifying each such default, and such other facts as Landlord may reasonably request, it being intended that any such statement delivered pursuant hereto may be relied upon by any prospective purchaser of the Building or of any interest of Landlord therein, any Mortgagee or prospective mortgagee thereof, any lessor or prospective lessor thereof, any lessee or prospective lessee thereof, or any prospective assignee of any mortgage thereof. *Time is of the essence* with respect to any such requested certificate, Tenant hereby acknowledging the importance of such certificates in mortgage financing arrangements, prospective sales and the like.

17. HAZARDOUS MATERIALS.

17.1 Prohibition. Tenant shall not, without the prior written consent of Landlord, bring or permit to be brought or kept in or on the Premises or elsewhere in the Building or the Property (i) any inflammable, combustible or explosive fluid, material, chemical or substance (except for standard office supplies stored in proper containers); and (ii) any Hazardous Material (hereinafter defined), other than the types and quantities of Hazardous Materials which are listed on Exhibit 6 attached hereto ("**Tenant's Hazardous Materials**"), provided that the same shall at all times be brought upon, kept or used in so-called 'control rooms' and in accordance with all applicable Environmental Laws (hereinafter defined) and prudent environmental practice and (with respect to medical waste and so-called "biohazard" materials) good medical practice. Tenant shall be responsible for assuring that all laboratory uses are adequately and properly vented. On or

before each anniversary of the Rent Commencement Date for the First Phase, and on any earlier date during the 12-month period on which Tenant intends to add a new Hazardous Material to, or materially increase the quantity of any Hazardous Material already on, the list of Tenant's Hazardous Materials, Tenant shall submit to Landlord an updated list of Tenant's Hazardous Materials for Landlord's review and approval, which approval shall not be unreasonably withheld, conditioned or delayed. Landlord shall have the right, from time to time, to inspect the Premises for compliance with the terms of this Section 17.1 at Tenant's sole cost and expense. Notwithstanding the foregoing, with respect to any of Tenant's Hazardous Materials which Tenant does not properly handle, store or dispose of in compliance with all applicable Environmental Laws (hereinafter defined), prudent environmental practice and (with respect to medical waste and so-called "biohazard materials") good medical practice, Tenant shall, upon written notice from Landlord, no longer have the right to bring such material into the Building or the Property until Tenant has demonstrated, to Landlord's reasonable satisfaction, that Tenant has implemented programs to thereafter properly handle, store or dispose of such material.

17.2 Environmental Laws. For purposes hereof, "**Environmental Laws**" shall mean all laws, statutes, ordinances, rules and regulations of any local, state or federal governmental authority having jurisdiction concerning environmental, health and safety matters, including but not limited to any discharge by any of the Tenant Parties into the air, surface water, sewers, soil or groundwater of any Hazardous Material (hereinafter defined) whether within or outside the Premises, including, without limitation (a) the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., (b) the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., (c) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 et seq., (d) the Toxic Substances Control Act of 1976, 15 U.S.C. Section 2601 et seq., and (e) Chapter 21E of the General Laws of Massachusetts. Tenant, at its sole cost and expense, shall comply with (i) all Environmental Laws, and (ii) any rules, requirements and safety procedures of the Massachusetts Department of Environmental Protection, the City of Cambridge and any insurer of the Building or the Premises with respect to Tenant's use, storage and disposal of any Hazardous Materials.

17.3 Hazardous Material Defined. As used herein, the term "**Hazardous Material**" means asbestos, oil or any hazardous, radioactive or toxic substance, material or waste or petroleum derivative which is or becomes regulated by any Environmental Law. The term "Hazardous Material" includes, without limitation, oil and/or any material or substance which is (i) designated as a "hazardous substance," "hazardous material," "oil," "hazardous waste" or toxic substance under any Environmental Law.

17.4 Testing. If any Mortgagee or governmental authority requires testing to determine whether there has been any release of Hazardous Materials and such testing is required as a result of the acts or omissions of any of the Tenant Parties, then Tenant shall reimburse Landlord upon demand, as additional rent, for the reasonable costs thereof. Tenant shall execute affidavits, certifications and the like, as may be reasonably requested by Landlord from time to time concerning Tenant's best knowledge and belief concerning the presence of Hazardous Materials in or on the Premises, the Building or the Property.

17.5 Indemnity; Remediation.

(a) Tenant hereby covenants and agrees to indemnify, defend and hold the Landlord Parties harmless from and against any and all Claims against any of the Landlord Parties arising out of contamination of any part of the Property or other adjacent property, which contamination arises as a result of: (i) the presence of Hazardous Material in the Premises, the presence of which is caused by any act or omission of any of the Tenant Parties, or (ii) from a breach by Tenant of its obligations under this Section 17. This indemnification of the Landlord Parties by Tenant includes, without limitation, reasonable costs incurred in connection with any investigation of site conditions or any cleanup, remedial, removal or restoration work or any other response action required by any federal, state or local governmental agency or political subdivision because of Hazardous Material present in the soil, soil vapor, or ground water on or under, or any indoor air in, the Building based upon the circumstances identified in the first sentence of this Section 17.5. The indemnification and hold harmless obligations of Tenant under this Section 17.5 shall survive the expiration or any earlier termination of this Lease. Without limiting the foregoing, if the presence of any Hazardous Material in the Building or otherwise at the Property is caused by any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property, Tenant shall promptly take all actions at Tenant's sole cost and expense as are necessary to return the Property and/or the Building or any adjacent property to their condition as of the date of this Lease, provided that Tenant shall first obtain Landlord's approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions, in Landlord's reasonable discretion, would not potentially have any adverse effect on the Property, and, in any event, Landlord shall not withhold its approval of any proposed actions which are required by applicable Environmental Laws.

(b) Without limiting the obligations set forth in Section 17.5(a) above, if any Hazardous Material is in, on, under, at or about the Building or the Property as a result of the acts or omissions of any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property that is in violation of any applicable Environmental Law or that requires the performance of any response action pursuant to any Environmental Law, Tenant shall promptly take all actions at Tenant's sole cost and expense as are necessary to reduce such Hazardous Material to amounts below any applicable Reportable Quantity, any applicable Reportable Concentration and any other applicable standard set forth in Environmental Laws such that no further response actions are required; provided that Tenant shall first obtain Landlord's written approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions would not be reasonably expected to have an adverse effect on the market value or utility of the Property for the Permitted Uses, and in any event, Landlord shall not withhold its approval of any proposed actions which are required by applicable Environmental Laws (such approved actions, "**Tenant's Remediation**").

(c) In the event that Tenant fails to complete Tenant's Remediation prior to the end of the Term, then:

(i) until the completion of Tenant's Remediation (as evidenced by the certification of Tenant's Licensed Site Professional (as such term is defined by applicable Environmental Laws), who shall be reasonably acceptable to Landlord) (the

"**Remediation Completion Date**"). Tenant shall pay to Landlord, with respect to the portion of the Premises which reasonably cannot be occupied by a new tenant until completion of Tenant's Remediation, (A) Additional Rent on account of Operating Costs and Taxes and (B) Base Rent in an amount equal to the greater of (1) the fair market rental value of such portion of the Premises (determined in substantial accordance with the process described in Section 1.2 above), and (2) Base Rent attributable to such portion of the Premises in effect immediately prior to the end of the Term; and

(ii) Tenant shall maintain responsibility for Tenant's Remediation and Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with all Environmental Laws. If Tenant does not diligently pursue completion of Tenant's Remediation, Landlord shall have the right to either (A) assume control for overseeing Tenant's Remediation, in which event Tenant shall pay all reasonable costs and expenses of Tenant's Remediation (it being understood and agreed that all costs and expenses of Tenant's Remediation incurred pursuant to contracts entered into by Tenant shall be deemed reasonable) within thirty (30) days of demand therefor (which demand shall be made no more often than monthly), and Landlord shall be substituted as the party identified on any governmental filings as the party responsible for the performance of such Tenant's Remediation or (B) require Tenant to maintain responsibility for Tenant's Remediation, in which event Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with all Environmental Laws, it being understood that Tenant's Remediation shall not contain any requirement that Tenant remediate any contamination to levels or standards more stringent than those associated with the Property's current office, research and development, laboratory, and vivarium uses.

(d) The provisions of this Section 17.5 shall survive the expiration or earlier termination of this Lease.

17.6 Disclosures. Prior to bringing any Hazardous Material into any part of the Property, Tenant shall deliver to Landlord the following information with respect thereto: (a) a description of handling, storage, use and disposal procedures; (b) all plans or disclosures and/or emergency response plans which Tenant has prepared, including without limitation Tenant's Spill Response Plan, and all plans which Tenant is required to supply to any governmental agency or authority pursuant to any Environmental Laws; and (c) other information reasonably requested by Landlord.

17.7 Removal. Tenant shall be responsible, at its sole cost and expense, for Hazardous Material and other biohazard disposal services for the Premises. Such services shall be performed by contractors reasonably acceptable to Landlord and on a sufficient basis to ensure that the Premises are at all times kept neat, clean and free of Hazardous Materials and biohazards except in appropriate, specially marked containers reasonably approved by Landlord. In addition, if any Legal Requirements or the trash removal company requires that any substances be disposed of separately from ordinary trash, Tenant shall make arrangements at Tenant's expense for such disposal directly with a qualified and licensed disposal company at a lawful disposal site.

17.8 Landlord's Obligations. Except to the extent contributed to or exacerbated by any of the Tenant Parties, Landlord hereby covenants and agrees to indemnify, defend and hold the Tenant Parties harmless from and against any and all Claims against any of the Tenant Parties arising out of contamination in violation of any applicable Environmental Law of any part of the Property or Premises or other adjacent property, which contamination arises as a result of: (i) the presence of Hazardous Material in, at, on, under or emanating from the Property prior to the Term Commencement Date for the First Phase; (ii) the presence of Hazardous Material in, at, on, under or emanating from the Property to the extent caused by any act or wrongful omission of any of the Landlord Parties

18. RULES AND REGULATIONS.

18.1 Rules and Regulations. Tenant will faithfully observe and comply with all rules and regulations promulgated from time to time with respect to the Building, the Property and construction within the Property (collectively, the "**Rules and Regulations**"). The current version of the Rules and Regulations is attached hereto as Exhibit 7. In the case of any conflict between the provisions of this Lease and any future rules and regulations, the provisions of this Lease shall control. Nothing contained in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce the Rules and Regulations or the terms, covenants or conditions in 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, contractors, visitors, invitees or licensees.

18.2 Energy Conservation. Notwithstanding anything to the contrary contained herein, Landlord may institute upon written notice to Tenant such policies, programs and measures as may be necessary, required, or expedient for the conservation and/or preservation of energy or energy services (collectively, the "**Conservation Program**"), *provided however*, that the Conservation Program does not, by reason of such policies, programs and measures, reduce the level of energy or energy services being provided to the Premises below the level of energy or energy services then being provided in comparably aged, first-class combination laboratory, research and development and office buildings in the East Cambridge/Kendall Square area, or as may be necessary or required to comply with Legal Requirements or standards or the other provisions of this Lease. Upon receipt of such notice, Tenant shall comply with the Conservation Program.

18.3 Recycling. Upon written notice, Landlord may establish policies, programs and measures for the recycling of paper, products, plastic, tin and other materials (a "**Recycling Program**"). Upon receipt of such notice, Tenant will comply with the Recycling Program at Tenant's sole cost and expense.

19. LAWS AND PERMITS.

19.1 Legal Requirements. Tenant shall be responsible at its sole cost and expense for complying with (and keeping the Premises in compliance with) all Legal Requirements which are applicable to Tenant's particular use or occupancy of, or Alterations made by or on behalf of Tenant to, the Premises (it being understood that "Alterations" do not include any portion of Landlord's Work). Tenant shall furnish all data and information to governmental authorities,

with a copy to Landlord, as required in accordance with Legal Requirements as they relate to Tenant's use or occupancy of the Premises or the Building. Tenant shall, at Tenant's sole expense, for so long as the Parking and Traffic Demand Management Plan (the "**PTDM**") dated March 29, 2013 as approved by the City of Cambridge on April 17, 2013 (and subject to the conditions set forth in such approval), as amended, remains applicable to the Property, (a) elect (by written notice to Landlord within thirty (30) days after the Term Commencement Date for the First Phase), implement and maintain one of the subsidy options set forth in the PTDM, (b) allow employees at the Premises to set-aside pre-tax funds as allowable under the Commuter Choice provision of the Federal tax code, (c) offer an "emergency ride home" program through the Charles River Transportation Management Association or other transportation provider for all employees at the Premises who commute by non-SOV mode at least 3 days per week, and (d) otherwise reasonably cooperate with Landlord in (i) connection with Landlord's reporting obligations under the PTDM, and (ii) encouraging employees to avoid vehicle trips at peak commuting hours and to seek alternate modes of transportation. In addition, for so long as the PTDM, as amended, remains applicable to the Property, Tenant is strongly encouraged to (A) allow flexible work schedules for employees to reduce the peak impacts of commuting, particularly by SOV, (B) operate an unsubsidized parking program for employees, intended to reduce SOV commuting, and (C) work with the Cambridge Office of Workforce Development to expand employment opportunities for Cambridge residents. 'If Tenant receives notice of any violation of Legal Requirements applicable to the Premises or the Building, it shall give prompt notice thereof to Landlord. Nothing contained in this Section 19.1 shall be construed to expand the uses permitted hereunder beyond the Permitted Uses. Landlord shall comply with any Legal Requirements and with any direction of any public office or officer relating to the maintenance or operation of the Building as a combination laboratory, research and development and office building, and the costs so incurred by Landlord shall be included in Operating Costs in accordance with the provisions of Section 5.2.

19.2 Required Permits. Tenant shall, at Tenant's sole cost and expense, use diligent good faith efforts to apply for, seek and obtain all necessary state and local licenses, permits and approvals needed for the operation of Tenant's business, including without limitation the permanent certificate of occupancy for the Premises (collectively, the "**Required Permits**"), as soon as reasonably possible, time being of the essence. Tenant shall thereafter maintain all Required Permits. Tenant, at Tenant's expense, shall at all times comply with the terms and conditions of each such Required Permit. Landlord shall cooperate with Tenant, at Tenant's sole cost and expense, in connection with its application for Required Permits.

20. DEFAULT.

20.1 Events of Default. The occurrence of any one or more of the following events shall constitute an "**Event of Default**" hereunder by Tenant:

(a) If Tenant fails to make any payment of Rent or any other payment required hereunder, as and when due (a "**Monetary Default**"), and such failure shall continue for a period of five (5) business days after notice thereof from Landlord to Tenant; provided, however, an Event of Default shall occur hereunder without any obligation of Landlord to give any notice if (i) Tenant fails to make any payment within five (5) business days after the due date therefor, and (ii) Landlord has given Tenant written notice under this Section 20.1(a) on more than one (1) occasion during the twelve (12) month interval preceding such failure by Tenant;

(b) Intentionally Omitted;

(c) If Tenant shall fail to execute and deliver to Landlord an estoppel certificate pursuant to Section 16 above or a subordination and attornment agreement pursuant to Section 22 below, within the timeframes set forth therein and such failure continues for five (5) business days after notice thereof;

(d) If Tenant shall fail to maintain any insurance required hereunder;

(e) If Tenant shall fail to restore the Security Deposit to its original amount or deliver a replacement Letter of Credit as required under Section 7 above;

(f) Intentionally Omitted;

(g) If Tenant shall make a Transfer in violation of the provisions of Section 13 above, or if any event shall occur or any contingency shall arise whereby this Lease, or the term and estate thereby created, would (by operation of law or otherwise) devolve upon or pass to any person, firm or corporation other than Tenant, except as expressly permitted under Section 13 hereof;

(h) Intentionally Omitted;

(i) The failure by Tenant to observe or perform any of the covenants or provisions of this Lease to be observed or performed by Tenant, other than as specified above, and such failure continues for more than thirty (30) days after notice thereof from Landlord; provided, further, that if the nature of Tenant's default is such that more than thirty (30) days are reasonably required for its cure, then Tenant shall not be deemed to be in default if Tenant shall commence such cure within said thirty (30) day period and thereafter diligently prosecute such cure to completion, which completion shall occur not later than ninety (90) days from the date of such notice from Landlord;

(j) Tenant shall be involved in financial difficulties as evidenced by an admission in writing by Tenant of Tenant's inability to pay its debts generally as they become due, or by the making or offering to make a composition of its debts with its creditors;

(k) Tenant shall make an assignment or trust mortgage, or other conveyance or transfer of like nature, of all or a substantial part of its property for the benefit of its creditors;

(l) an attachment on mesne process, on execution or otherwise, or other legal process shall issue against Tenant or its property and a sale of any of its assets shall be held thereunder;

(m) any judgment, attachment or the like in excess of $100,000 shall be entered, recorded or filed against Tenant in any court, registry, etc. and Tenant shall fail to pay such judgment within thirty (30) days after the judgment shall have become final beyond appeal or to discharge or secure by surety bond such lien, attachment, etc. within thirty (30) days of such entry, recording or filing, as the case may be;

(n) the leasehold hereby created shall be taken on execution or by other process of law and shall not be revested in Tenant within thirty (30) days thereafter;

(o) a receiver, sequesterer, trustee or similar officer shall be appointed by a court of competent jurisdiction to take charge of all or any part of Tenant's Property and such appointment shall not be vacated within thirty (30) days; or

(p) any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganizations, arrangements, compositions or other relief from creditors, and, in the case of any proceeding instituted against it, if Tenant shall fail to have such proceedings dismissed within thirty (30) days or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding.

Tenant shall reimburse Landlord, within thirty (30) days after demand, for up to $1,000.00 of Landlord's reasonable out-of-pocket costs and expenses (including without limitation legal fees and costs) incurred in connection with the preparation and delivery of each notice of default delivered pursuant to this Section 20.1.

20.2 Remedies. Upon an Event of Default, Landlord may, by notice to Tenant, elect to terminate this Lease; and thereupon (and without prejudice to any remedies which might otherwise be available for arrears of Rent or preceding breach of covenant or agreement and without prejudice to Tenant's liability for damages as hereinafter stated), upon the giving of such notice, this Lease shall terminate as of the date specified therein as though that were the Expiration Date. Upon such termination, Landlord shall have the right to utilize the Security Deposit or draw down the entire Letter of Credit, as applicable, and apply the proceeds thereof to its damages hereunder. Without being taken or deemed to be guilty of any manner of trespass or conversion, and without being liable to indictment, prosecution or damages therefor, Landlord may, by lawful process, enter into and upon the Premises (or any part thereof in the name of the whole); repossess the same, as of its former estate; and expel Tenant and those claiming under Tenant. The words "re-entry" and "re-enter" as used in this Lease are not restricted to their technical legal meanings.

20.3 Damages – Termination.

(a) Upon the termination of this Lease under the provisions of this Section 20, Tenant shall pay to Landlord Rent up to the time of such termination, shall continue to be liable for any preceding breach of covenant, and in addition, shall pay to Landlord as damages, at the election of Landlord, either:

(i) the amount (discounted to present value at the rate of five percent (5%) per annum) by which, at the time of the termination of this Lease (or at any time thereafter if Landlord shall have initially elected damages under Section 20.3(a)(ii) below), (x) the aggregate of Rent projected over the period commencing with such termination and ending on the Expiration Date, exceeds (y) the aggregate projected rental value of the Premises for such period, taking into account a reasonable time period during which the Premises shall be unoccupied, plus all Reletting Costs (hereinafter defined); or

(ii) amounts equal to Rent which would have been payable by Tenant had this Lease not been so terminated, payable upon the due dates therefor specified herein following such termination and until the Expiration Date, provided, however, if Landlord shall re-let the Premises during such period, that Landlord shall credit Tenant with the net rents received by Landlord from such re-letting, such net rents to be determined by first deducting from the gross rents as and when received by Landlord from such re-letting the expenses incurred or paid by Landlord in terminating this Lease, as well as the expenses of re-letting, including altering and preparing the Premises for new tenants, brokers' commissions, and all other similar and dissimilar expenses properly chargeable against the Premises and the rental therefrom (collectively, "**Reletting Costs**"), it being understood that any such re-letting may be for a period equal to or shorter or longer than the remaining Term; and provided, further, that (x) in no event shall Tenant be entitled to receive any excess of such net rents over the sums payable by Tenant to Landlord hereunder and (y) in no event shall Tenant be entitled in any suit for the collection of damages pursuant to this Section 2Q.3(a)(ii) to a credit in respect of any net rents from a re-letting except to the extent that such net rents are actually received by Landlord prior to the commencement of such suit. If the Premises or any part thereof should be re-let in combination with other space, then proper apportionment on a square foot area basis shall be made of the rent received from such re-letting and of the expenses of re-letting.

(b) In calculating the amount due under Section 20.3(a)(i), above, there shall be included, in addition to the Base Rent, all other considerations agreed to be paid or performed by Tenant, including without limitation Tenant's Share of Operating Costs and Tenant's Tax Share of Taxes, on the assumption that all such amounts and considerations would have increased at the rate of five percent (5%) per annum for the balance of the full term hereby granted.

(c) Suit or suits for the recovery of such damages, or any installments thereof, may be brought by Landlord from time to time at its election, and nothing contained herein shall be deemed to require Landlord to postpone suit until the date when the Term would have expired if it had not been terminated hereunder.

(d) Nothing herein contained shall be construed as limiting or precluding the recovery by Landlord against Tenant of any sums or damages to which, in addition to the damages particularly provided above, Landlord may lawfully be entitled by reason of any Event of Default hereunder.

(e) In lieu of any other damages or indemnity and in lieu of full recovery by Landlord of all sums payable under all the foregoing provisions of this Section 20.3, Landlord may, by written notice to Tenant, at any time after this Lease is terminated under any of the provisions herein contained or is otherwise terminated for breach of any obligation of Tenant and before such full recovery, elect to recover, and Tenant shall thereupon pay, as liquidated damages, an amount equal to the aggregate of (x) an amount equal to the lesser of (1) Rent

accrued under this Lease in the twelve (12) months immediately prior to such termination, or (2) Rent payable during the remaining months of the Term if this Lease had not been terminated, plus (y) the amount of Rent accrued and unpaid at the time of termination, less (z) the amount of any recovery by Landlord under the foregoing provisions of this Section 20.3 up to the time of payment of such liquidated damages.

20.4 Landlord's Self-Help; Fees and Expenses. If Tenant shall default in the performance of any covenant on Tenant's part to be performed in this Lease contained, including without limitation the obligation to maintain the Premises in the required condition pursuant to Section 10.1 above, Landlord may, upon reasonable advance notice, except that no notice shall be required in an emergency, immediately, or at any time thereafter, perform the same for the account of Tenant. Tenant shall pay to Landlord upon demand therefor any costs incurred by Landlord in connection therewith, together with interest at the Default Rate until paid in full. In addition, Tenant shall pay all of Landlord's out-of-pocket costs and expenses, including without limitation reasonable attorneys' fees, incurred (i) in enforcing any obligation of Tenant under this Lease or (ii) as a result of Landlord or any of the Landlord Parties, without its fault, being made party to any litigation pending by or against any of the Tenant Parties.

20.5 Waiver of Redemption, Statutory Notice and Grace Periods. Tenant does hereby waive and surrender all rights and privileges which it might have under or by reason of any present or future Legal Requirements to redeem the Premises or to have a continuance of this Lease for the Term hereby demised after being dispossessed or ejected therefrom by process of law or under the terms of this Lease or after the termination of this Lease as herein provided. Except to the extent prohibited by Legal Requirements, any statutory notice and grace periods provided to Tenant by law are hereby expressly waived by Tenant.

20.6 Landlord's Remedies Not Exclusive. The specified remedies to which Landlord may resort hereunder are cumulative and are not intended to be exclusive of any remedies or means of redress to which Landlord may at any time be lawfully entitled, and Landlord may invoke any remedy (including the remedy of specific performance) allowed at law or in equity as if specific remedies were not herein provided for.

20.7 No Waiver. Landlord's failure to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease, or any of the Rules and Regulations promulgated hereunder, shall not prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation. The receipt by Landlord of Rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. The failure of Landlord to enforce any of such Rules and Regulations against Tenant and/or any other tenant in the Building shall not be deemed a waiver of any such Rules and Regulations. No provisions of this Lease shall be deemed to have been waived by either party unless such waiver be in writing signed by such party. No payment by Tenant or receipt by Landlord of a lesser amount than the Rent herein stipulated shall be deemed to be other than on account of the stipulated Rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent 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 Rent or pursue any other remedy in this Lease provided.

20.8 Restrictions on Tenant's Rights. During the continuation of any Event of Default, (a) Landlord shall not be obligated to provide Tenant with any notice pursuant to Sections 2.3 and 2.4 above; and (b) Tenant shall not have the right to make, nor to request Landlord's consent or approval with respect to, any Alterations.

20.9 Landlord Default. Notwithstanding anything to the contrary contained in the Lease, Landlord shall in no event be in default in the performance of any of Landlord's obligations under this Lease unless Landlord shall have failed to perform such obligations within thirty (30) days (or such additional time as is reasonably required to correct any such default, provided Landlord commences cure within 30 days) after notice by Tenant to Landlord properly specifying wherein Landlord has failed to perform any such obligation. Except as expressly set forth in this Lease, Tenant shall not have the right to terminate or cancel this Lease or to withhold rent or to set-off or deduct any claim or damages against rent as a result of any default by Landlord or breach by Landlord of its covenants or any warranties or promises hereunder, unless the same continues after notice to Landlord thereof and a opportunity for Landlord to cure the same as set forth above. In addition, Tenant shall not assert any right to deduct the cost of repairs or any monetary claim against Landlord from rent thereafter due and payable under this Lease.

21. SURRENDER; ABANDONED PROPERTY; HOLD-OVER.

21.1 Surrender.

(a) Upon the expiration or earlier termination of the Term, Tenant shall (i) peaceably quit and surrender to Landlord the Premises (including without limitation all lab benches, fume hoods, electric, plumbing, heating and sprinkling systems, fixtures and outlets, vaults, paneling, molding, shelving, radiator enclosures, cork, rubber, linoleum and composition floors, ventilating, silencing, air conditioning and cooling equipment therein) broom clean, in good order, repair and condition excepting only ordinary wear and tear and damage by fire or other insured Casualty; (ii) remove all of Tenant's Property, all autoclaves and cage washers and, to the extent specified by Landlord, Alterations made by Tenant; and (iii) repair any damages to the Premises or the Building caused by the installation or removal of Tenant's Property and/or such Alterations. Tenant's obligations under this Section 21.1(a) shall survive the expiration or earlier termination of this Lease.

(b) At least thirty (30) days prior to the expiration of the Term (or, if applicable, within five (5) business days after any earlier termination of this Lease), Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Legal Requirements) to be taken by Tenant in order to render the Premises (including, without limitation, floors, walls, ceilings, counters, piping, supply lines, waste lines and plumbing in or serving the Premises and all exhaust or other ductwork in or serving the Premises) free of Hazardous Materials and otherwise released for unrestricted use and occupancy (the "**Surrender Plan**"). The Surrender Plan (i) shall be accompanied by a current list of (A) all local, state and federal licenses, permits and approvals held by or on behalf of any Tenant Party with respect to Hazardous Materials in, on, under, at or about the Premises, and (B) Tenant's Hazardous Materials, and (ii) shall be subject to the review and approval of Landlord's environmental consultant. In connection with review and approval of the Surrender Plan, upon request of

Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning the use of and operations within the Premises as Landlord shall request. On or before the expiration of the Term (or within thirty (30) days after any earlier termination of this Lease, during which period Tenant's use and occupancy of the Premises shall be governed by Section 21.3 below), Tenant shall (i) perform or cause to be performed all actions described in the approved Surrender Plan, and (ii) deliver to Landlord a certification from a certified industrial hygienist reasonably acceptable to Landlord certifying that the Premises do not contain any Hazardous Materials and evidence that the approved Surrender Plan shall have been satisfactorily completed by a contractor acceptable to Landlord, and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the expiration of the Term (or, if applicable, the date which is thirty (30) days after any earlier termination of this Lease), free of Hazardous Materials and otherwise available for unrestricted use and occupancy. Landlord shall have the unrestricted right to deliver the Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties. Such third parties and the Landlord Parties shall be entitled to rely on the Surrender Report. If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address the use of Hazardous Materials by any of the Tenant Parties in, on, at, under or about the Premises, (A) Landlord shall have the right to take any such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Property are surrendered in the condition required hereunder, the cost of which actions shall be reimbursed by Tenant as Additional Rent upon demand; and (B) if the Term shall have ended, unless and until Landlord elects to take such actions to assure that the Premises are surrendered in the condition required hereunder, Tenant shall be deemed to be a holdover tenant subject to the provisions of Section 21.3 below until the date on which Tenant delivers the Surrender Report (in the form required hereunder) to Landlord. Tenant's obligations under this Section 21.1(b) shall survive the expiration or earlier termination of the Term.

(c) No act or thing done by Landlord during the Term shall be deemed an acceptance of a surrender of the Premises, and no agreement to accept such surrender shall be valid, unless in writing signed by Landlord. Unless otherwise agreed by the parties in writing, no employee of Landlord or of Landlord's agents shall have any power to accept the keys of the Premises prior to the expiration or earlier termination of this Lease. The delivery of keys to any employee of Landlord or of Landlord's agents shall not operate as a termination of this Lease or a surrender of the Premises.

(d) Notwithstanding anything to the contrary contained herein, Tenant shall, at its sole cost and expense, remove from the Premises, prior to the end of the Term, any item installed by or for Tenant and which, pursuant to Legal Requirements, must be removed therefrom before the Premises may be used by a subsequent tenant.

(e) Tenant hereby assigns to Landlord any warranties in effect on the last day of the Term with respect to any fixtures and Alterations installed in the Premises. Tenant shall provide Landlord with copies of any such warranties prior to the expiration of the Term (or, if the Lease is earlier terminated, within 5 days thereafter).

21.2 Abandoned Property. After the expiration or earlier termination hereof, if Tenant fails to remove any property from the Building or the Premises which Tenant is obligated by the terms of this Lease to remove within five (5) business days after written notice from Landlord, such property (the "**Abandoned Property**") shall be conclusively deemed to have been abandoned, and may either be retained by Landlord as its property or sold or otherwise disposed of in such manner as Landlord may see fit. If any item of Abandoned Property shall be sold, Tenant hereby agrees that Landlord may receive and retain the proceeds of such sale and apply the same, at its option, to the expenses of the sale, the cost of moving and storage, any damages to which Landlord may be entitled under Section 20 hereof or pursuant to law, and to any arrears of Rent.

21.3 Holdover. If any of the Tenant Parties holds over after the end of the Term, Tenant shall be deemed a tenant-at-sufferance subject to the provisions of this Lease; provided that whether or not Landlord has previously accepted payments of Rent from Tenant, (i) Tenant shall pay Base Rent at 150% of the highest rate of Base Rent payable during the Term, (ii) Tenant shall continue to pay to Landlord all additional rent, and (iii) Tenant shall be liable for all damages, including without limitation lost business and consequential damages, incurred by Landlord as a result of such holding over, Tenant hereby acknowledging that Landlord may need the Premises after the end of the Term for other tenants and that the damages which Landlord may suffer as the result of Tenant's holding over cannot be determined as of the Execution Date. Nothing contained herein shall grant Tenant the right to holdover after the expiration or earlier termination of the Term.

22. MORTGAGEE RIGHTS.

22.1 Subordination. Subject to execution of a commercially reasonable subordination, non-disturbance and attornment agreement, Tenant's rights and interests under this Lease shall be subject and subordinate to any ground lease, and to any mortgages, deeds of trust, overleases, or similar instruments covering the Premises, the Building and/or the Land and to all advances, modifications, renewals, replacements, and extensions thereof (each of the foregoing, a "**Mortgage**"); *provided*, *however*, at any Mortgagee's election, this Lease shall be prior to the lien of the future Mortgage held by such Mortgagee. Tenant further shall attorn to and recognize any successor landlord, whether through foreclosure or otherwise, as if the successor landlord were the originally named landlord. Tenant agrees to execute, acknowledge and deliver such instruments, confirming such subordination, non-disturbance and attornment within fifteen (15) days of request therefor.

22.2 Notices. Tenant shall give each Mortgagee, at the address provided to Tenant, the same notices given to Landlord concurrently with the notice to Landlord, and each Mortgagee shall have a reasonable opportunity thereafter to cure a Landlord default, and Mortgagee's curing of any of Landlord's default shall be treated as performance by Landlord.

22.3 Mortgagee Liability. Tenant acknowledges and agrees that if any Mortgage shall be foreclosed, (a) the liability of the Mortgagee and its successors and assigns shall exist only so long as such Mortgagee or purchaser is the owner of the Premises, and such liability shall not continue or survive after further transfer of ownership; and (b) such Mortgagee and its successors or assigns shall not be (i) liable for any act or omission of any prior lessor under this Lease;

(ii) liable for the performance of Landlord's covenants pursuant to the provisions of this Lease which arise and accrue prior to such entity succeeding to the interest of Landlord under this Lease or acquiring such right to possession, provided, however, that the foregoing shall not release such Mortgagee and/or its successors or assigns from liability for any default of Landlord's obligations under the Lease continuing after the date on which such Mortgagee succeeds to Landlord's interest hereunder, including without limitation any maintenance obligations; (iii) subject to any offsets or defense which Tenant may have at any time against Landlord; (iv) bound by any base rent or other sum which Tenant may have paid previously for more than one (1) month; or (v) liable for the performance of any covenant of Landlord under this Lease which is capable of performance only by the original Landlord.

22.4 Future Ground Lease. Subject to the execution of a commercially reasonable subordination, non-disturbance and attornment agreement ("**SNDA**") (the parties hereby agreeing that the form attached hereto as Exhibit 9 is commercially reasonable) by the fee owner, the rights and interest of Tenant under this Lease shall be subject and subordinate to any lease of the Building in connection with a ground lease, sale and leaseback or any sublease of premises including the Building in connection with a lease and subleaseback that are now existing or may hereafter occur (such leaseback or subleaseback to be referred to in this Section 22.4 as a "**Primary Lease**"), if the lessor or sublessor pursuant to such Primary Lease (such lessor or sublessor to be referred to in this Section 22.4 as the "**Primary Lessor**") shall elect, by written notice delivered to the Tenant, to subject and subordinate the rights and interest of Tenant under this Lease to the Primary Lease; it is further agreed that the Primary Lessor may elect to give the rights and interest of Tenant under this Lease priority over the Primary Lease. In the event of either such election, and upon notification by the Primary Lessor to Tenant to that effect, the rights and interest of Tenant under this Lease shall be deemed to be subordinate to, or to have priority over, as the case may be, the Primary Lease, whether this Lease is dated prior to or subsequent to the date of the Primary Lease. Tenant shall execute and deliver commercially reasonable instruments to evidence the foregoing (including, without limitation, the SNDA) within ten (10) business days after demand, provided such instruments do not materially increase Tenant's obligations or materially decrease Tenant's rights, under this Lease.

23. QUIET ENJOYMENT. Landlord covenants that so long as there is no Event of Default, Tenant shall peaceably and quietly hold, occupy and enjoy the Premises during the Term from and against the claims of all persons lawfully claiming by, through or under Landlord subject, nevertheless, to the covenants, agreements, terms, provisions and conditions of this Lease, any matters of record or of which Tenant has knowledge and to any Mortgage to which this Lease is subject and subordinate, as hereinabove set forth.

24. NOTICES. Any notice, consent, request, bill, demand or statement hereunder (each, a "**Notice**") by either party to the other party shall be in writing and shall be deemed to have been duly given when either delivered by hand or by nationally recognized overnight courier (in either case with evidence of delivery or refusal thereof) addressed as follows:

If to Landlord:

MIT 130 Brookline LLC
c/o MIT Investment Management Company
238 Main Street, Suite 200
Cambridge, MA 02142
Attention: Steven C. Marsh

With copies to:

Goulston & Storrs
400 Atlantic Avenue
Boston, MA 02110
Attention: Colleen P. Hussey, Esquire

and

Colliers International
336 Main Street
Cambridge, MA 02142
Attention: Kristina Descoteaux

if to Tenant:

Intellia Therapeutics, Inc.
130 Brookline Street
Cambridge, MA 02139
Attention: Nessan Bermingham, PhD

Either party may at any time change the address or specify an additional address for such Notices by delivering or mailing, as aforesaid, to the other party a notice stating the change and setting forth the changed or additional address, provided such changed or additional address is within the United States. Notices shall be effective upon the date of receipt or refusal thereof.

25. MISCELLANEOUS.

25.1 Separability. If any provision of this Lease or portion of such provision or the application thereof to any person or circumstance is for any reason held invalid or unenforceable, the remainder of this Lease (or the remainder of such provision) and the application thereof to other persons or circumstances shall not be affected thereby.

25.2 Captions. The captions are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Lease nor the intent of any provisions thereof.

25.3 Broker. Tenant and Landlord each warrants and represents that it has dealt with no broker in connection with the consummation of this Lease other than Cushman & Wakefield ("**Broker**"). Tenant and Landlord each agrees to defend, indemnify and save the other harmless

from and against any Claims arising in breach of the representation and warranty set forth in the immediately preceding sentence. Landlord shall be solely responsible for the payment of any brokerage commissions to Broker.

25.4 Entire Agreement. This Lease, Lease Summary Sheet and Exhibits 1-9 attached hereto and incorporated herein contain the entire and only agreement between the parties and any and all statements and representations, written and oral, including previous correspondence and agreements between the parties hereto, are merged herein. Tenant acknowledges that all representations and statements upon which it relied in executing this Lease are contained herein and that Tenant in no way relied upon any other statements or representations, written or oral. This Lease may not be modified orally or in any manner other than by written agreement signed by the parties hereto.

25.5 Governing Law. This Lease is made pursuant to, and shall be governed by, and construed in accordance with, the laws of the Commonwealth of Massachusetts and any applicable local municipal rules, regulations, by-laws, ordinances and the like.

25.6 Representation of Authority. By his or her execution hereof, each of the signatories on behalf of the respective parties hereby warrants and represents to the other that he or she is duly authorized to execute this Lease on behalf of such party. Upon Landlord's request, Tenant shall provide Landlord with evidence that any requisite resolution, corporate authority and any other necessary consents have been duly adopted and obtained.

25.7 Expenses Incurred by Landlord Upon Tenant Requests. Tenant shall, upon demand, reimburse Landlord for all reasonable out-of-pocket expenses, including, without limitation, legal fees, incurred by Landlord in connection with all requests by Tenant for consents, approvals or execution of collateral documentation related to this Lease, including, without limitation, costs incurred by Landlord in the review and approval of Tenant's plans and specifications in connection with proposed Alterations to be made by Tenant to the Premises or in connection with requests by Tenant for Landlord's consent to make a Transfer. Such costs shall be deemed to be additional rent under this Lease.

25.8 Survival. Without limiting any other obligation of Tenant which may survive the expiration or prior termination of the Term, all obligations on the part of Tenant to indemnify, defend, or hold Landlord harmless, as set forth in this Lease shall survive the expiration or prior termination of the Term.

25.9 Limitation of Liability. Tenant shall neither assert nor seek to enforce any claim against Landlord or any of the Landlord Parties, or the assets of any of the Landlord Parties, for breach of this Lease or otherwise, other than against Landlord's interest in the Building and in the uncollected rents, issues and profits thereof, and Tenant agrees to look solely to such interest for the satisfaction of any liability of Landlord under this Lease. This Section 26.9 shall not limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord. **Landlord and Tenant specifically agree that in no event shall any officer, director, trustee, employee or representative of Landlord or any of the other Landlord Parties ever be personally liable for any obligation under this Lease, nor shall Landlord or any of the other Landlord Parties be liable for consequential or incidental damages or for lost profits whatsoever in connection with this Lease.**

25.10 Binding Effect. The covenants, agreements, terms, provisions and conditions of this Lease shall bind and benefit the successors and assigns of the parties hereto with the same effect as if mentioned in each instance where a party hereto is named or referred to, except that no violation of the provisions of Section 13 hereof shall operate to vest any rights in any successor or assignee of Tenant.

25.11 Landlord Obligations upon Transfer. Upon any sale, transfer or other disposition of the Building, Landlord shall be entirely freed and relieved from the performance and observance thereafter of all covenants and obligations hereunder on the part of Landlord to be performed and observed, it being understood and agreed in such event (and it shall be deemed and construed as a covenant running with the land) that the person succeeding to Landlord's ownership of said reversionary interest shall thereupon and thereafter assume, and perform and observe, any and all of such covenants and obligations of Landlord, except as otherwise agreed in writing.

25.12 No Grant of Interest. Tenant shall not grant any security interest whatsoever in (a) any fixtures within the Premises or (b) any item paid in whole or in part with Landlord's Contribution without the consent of Landlord.

25.13 No Air Rights. No rights to any view or to light or air over any property, whether belonging to Landlord or any other person, are granted to Tenant by this Lease. If at any time any windows of the Premises are temporarily darkened or the light therefrom is obstructed by reason of any repairs, improvements, maintenance or cleaning in or about the Property, the same shall be without liability to Landlord and without any reduction or diminution of Tenant's obligations under this Lease.

25.14 Landlord Termination Right. If Tenant shall abandon the Premises for a period in excess of six (6) months (i.e., whether or not the keys shall have been surrendered or the Rent shall have been paid, Tenant is not actively operating its business in the Premises, is not actively marketing the Premises for a Transfer, there is not a sublease, licenses relating to use or occupancy of space or other occupancy agreements for the Premises to a party that is actively operating its business in the Premises, and the Premises are not undergoing material modifications or affected by casualty, condemnation or other circumstances preventing the foregoing), Landlord shall have the right to terminate this Lease upon at least thirty (30) days' written notice to Tenant. Upon the effective date of any such termination, (a) Tenant shall surrender the Premises in the condition required under Section 21 above, and (b) all rights and obligations of the parties hereunder shall terminate and be of no further force and effect except with respect to obligations accruing with respect to the period of time prior to such termination date.

[*SIGNATURES ON FOLLOWING PAGE*]

IN WITNESS WHEREOF the parties hereto have executed this Lease as a sealed instrument as of the Execution Date.

LANDLORD

MIT 130 BROOKLINE LLC

By: Massachusetts Institute of Technology,
its manager

By: MIT Investment Management Company,
its authorized agent

By: /s/ Seth Alexander
Name: Seth Alexander
Title: President

TENANT

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessan Bermingham
Name: Nessan Bermingham
Title: CEO and President

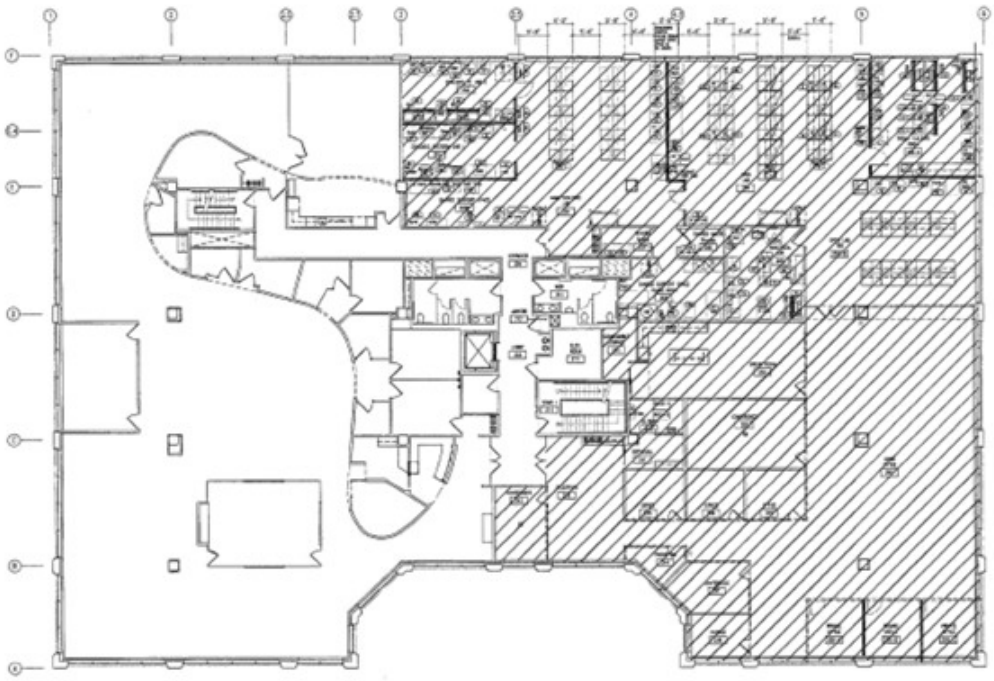
EXHIBIT 1A

LEASE PLAN

Level 1

Intellia Therapeutics, Inc Premises

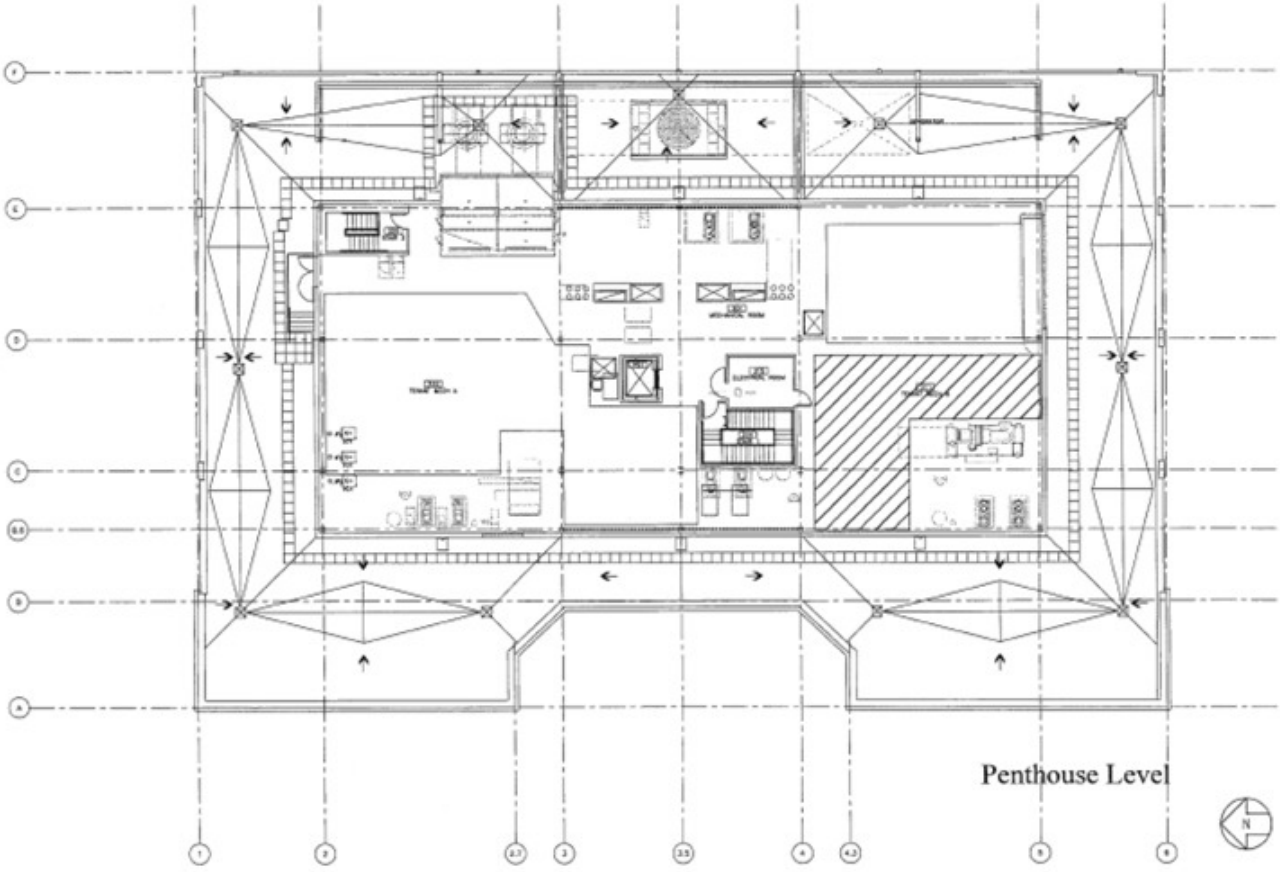
LEASE PLAN October 1, 2014 MIT 130 Brookline LLC



Level 2

Intellia Therapeutics, Inc Premises

LEASE PLAN October 1, 2014 MIT 130 Brookline LLC

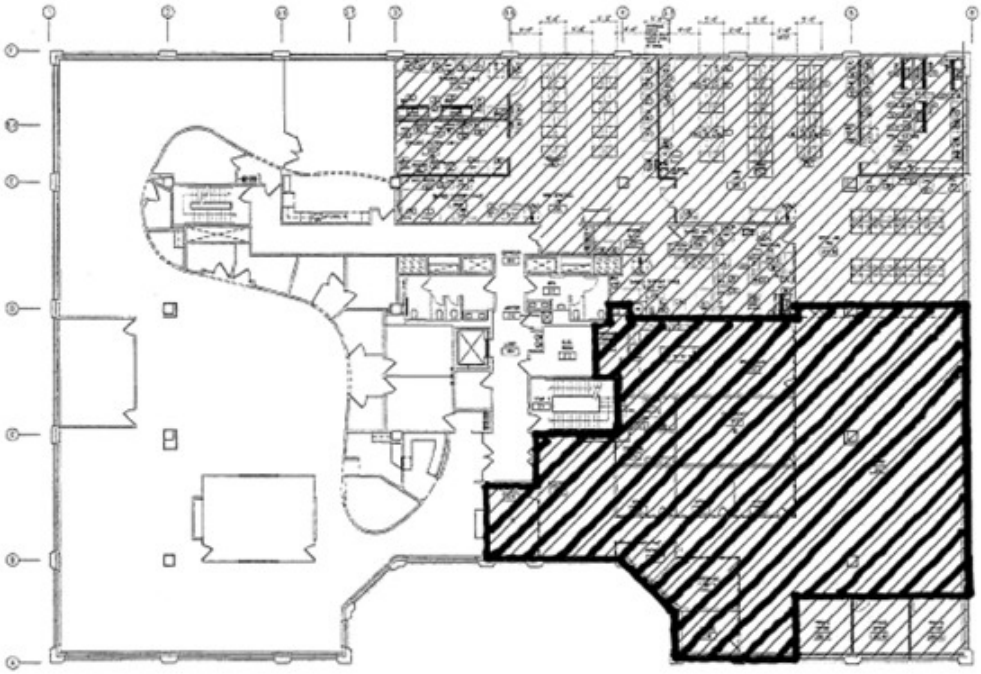


Intellia Therapeutics, Inc Premises

LEASE PLAN October 1, 2014 MIT 130 Brookline LLC

EXHIBIT 1B

PLAN OF FIRST PHASE

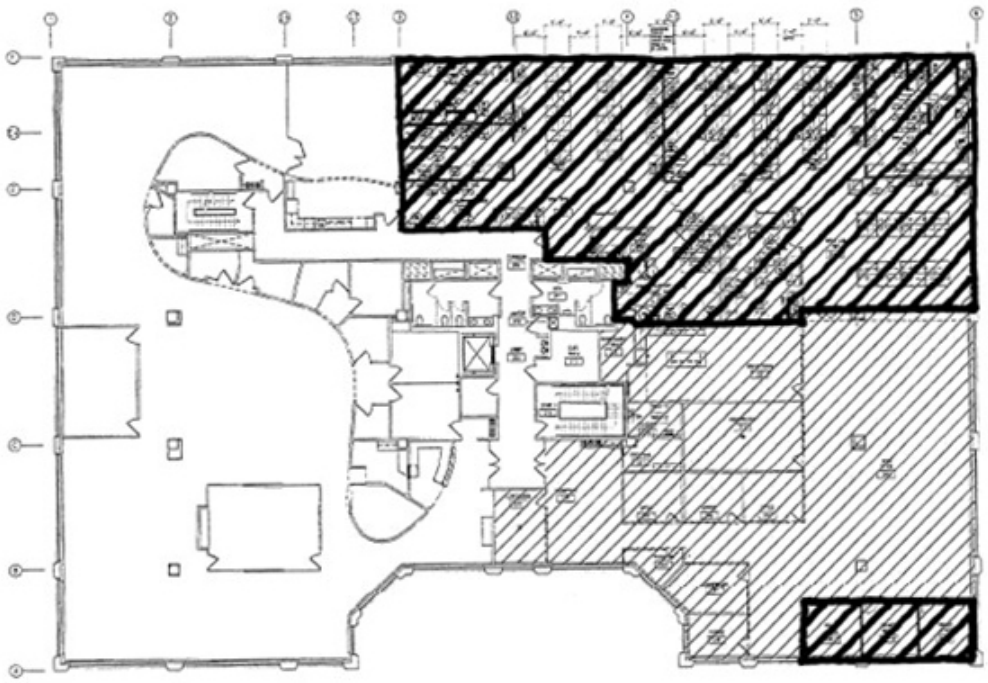


Intellia Therapeutics, Inc Premises - FIRST PHASE

LEASE PLAN October 1, 2014 MIT 130 Brookline LLC

EXHIBIT 1C

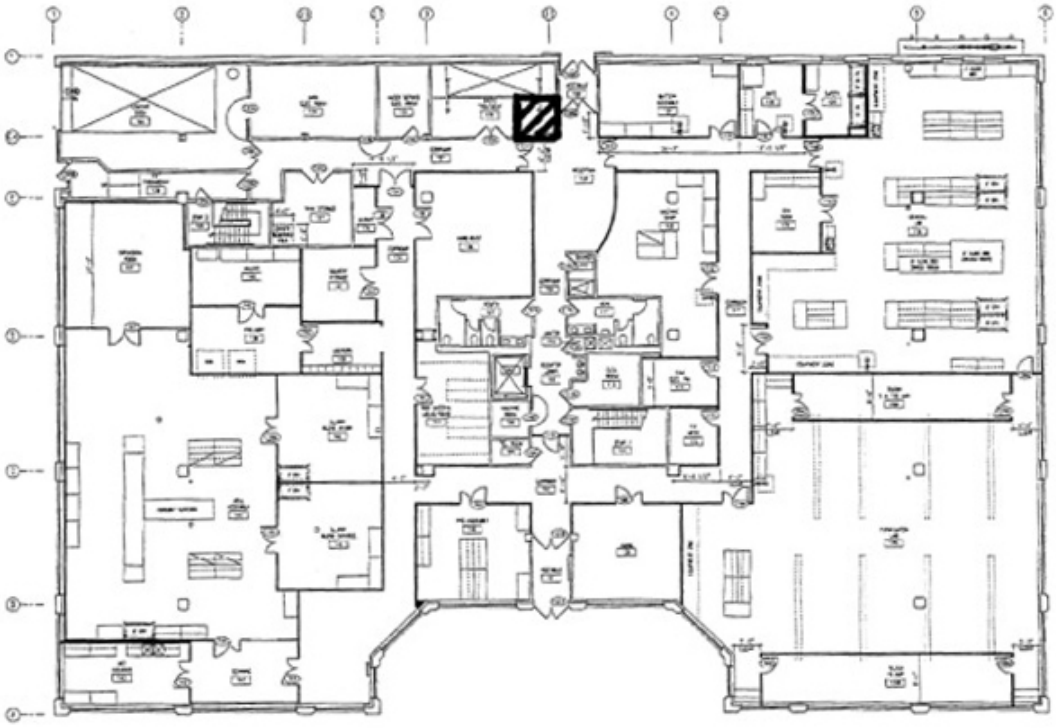
PLAN OF FINAL PHASE



Level 2

Intellia Therapeutics, Inc Premises – SECOND PHASE

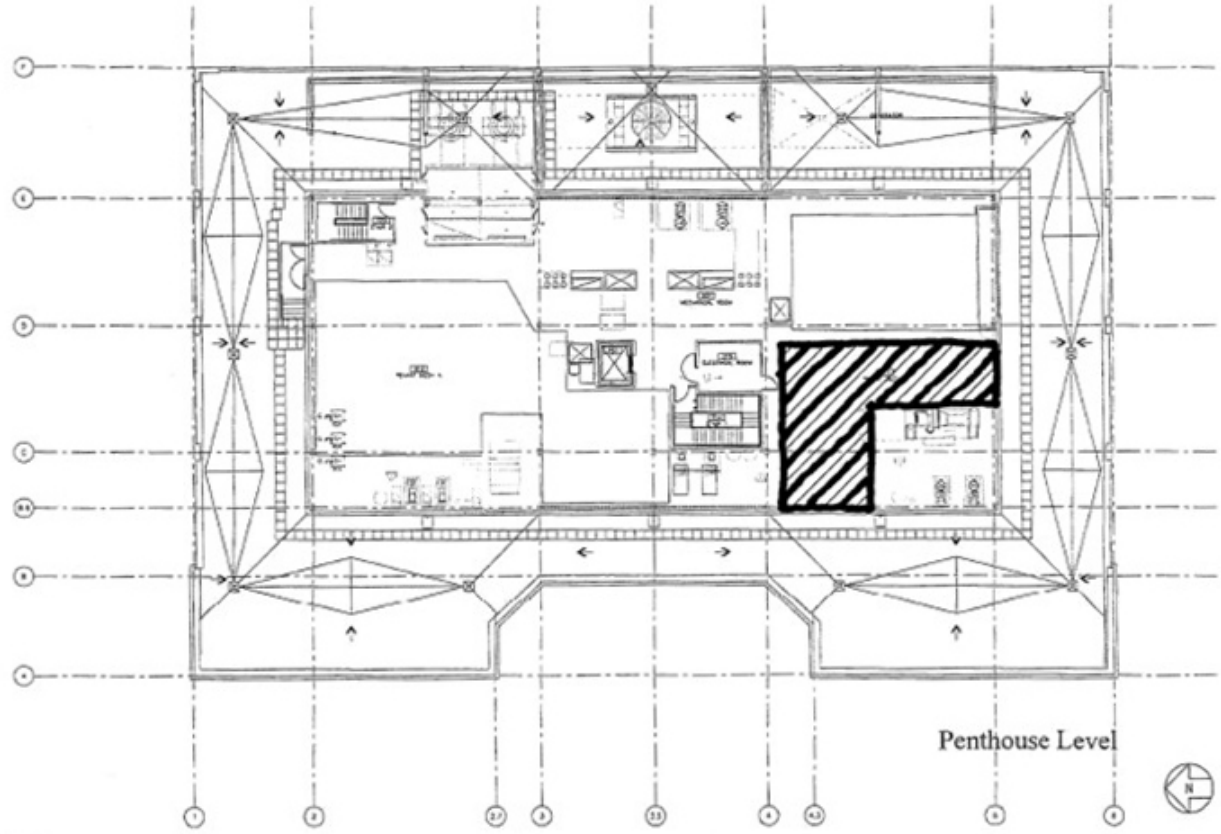
LEASE PLAN October 1, 2014 MIT 130 Brookline LLC



Level 1

Intellia Therapeutics, Inc Premises - SECOND PHASE

LEASE PLAN October 1, 2014 MIT 130 Brookline LLC



Intellia Therapeutics, Inc Premises – SECOND PHASE

LEASE PLAN October 1, 2014 MIT 130 Brookline LLC

EXHIBIT 2

LEGAL DESCRIPTION

PARCEL A

The land with the buildings thereon situated in Cambridge, numbered 17 Tudor Street, bounded and described as follows:

NORTHEASTERLY	by Tudor Street, formerly known as Decatur Street, exactly seventy-five (75) feet;
SOUTHEASTERLY	by land now or formerly of William C. Thairlwall, about one hundred ninety (190) feet, more or less;
SOUTHWESTERLY	by Emily Street, exactly seventy-five (75) feet;
NORTHWESTERLY	by land now or formerly of Flamand & Lynch, about one hundred ninety (190) feet, more or less.

Containing in all approximately 14,250 square feet more or less.

PARCEL B

A certain parcel of land with the buildings thereon situated in said Cambridge, numbered 27 Tudor Street, being lot marked “C” on a Plan of Land in Cambridge, W.A. Mason & Son, Surveyors, dated June 11, 1918, recorded with the Middlesex South District Registry of Deeds in Plan Book 268, Plan 14, and bounded and described as follows:

NORTHEASTERLY	by Tudor Street, sixty two and 67/100 (62.67) feet;
NORTHWESTERLY	by lots marked “A” and “B” on said Plan, one hundred ninety (190) feet;
SOUTHWESTERLY	by Emily Street, sixty two and 67/100 (62.67) feet; and
SOUTHEASTERLY	by the lot marked “Boston Machine Screw Co.” on said Plan, one hundred ninety (190) feet.

Containing, according to said Plan, 11,907 square feet of land.

PARCEL I

A certain Parcel of land in the County of Middlesex and said Commonwealth, bounded and described as follows:

Northeasterly by Southwesterly line of Tudor Street, one hundred twenty-five and 33/100 feet;

Southeasterly by land now or formerly of Albert E. Lynch, one hundred ninety and 22/100 feet;

Southwesterly by Emily Street, one hundred twenty-five and 33/100 feet; and

Northwesterly by Brookline Street, one hundred and ninety feet.

Said premises are shown on a plan, filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 169, Page 257, with Certificate 26086.

PARCEL II

A certain parcel of land, situated in said Cambridge, bounded and described as follows:

Southwesterly by the Northeasterly line of Tudor Street, one hundred feet;

Northwesterly by the Southeasterly line of Brookline Street, fifty feet;

Northeasterly by land now or formerly of Cambridgeport Savings Bank, one hundred feet; and

Southeasterly by land now or formerly of Samuel J. Kelley et al, Trustees, fifty feet.

Said premises are shown on a plan filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 104, Page 173, with Certificate 16011.

The foregoing premises are subject to the matters set forth or referred to in Certificate of Title No. 126073.

EXHIBIT 3

LANDLORD'S WORK

GENERAL

The existing second floor spec lab will be modified to accommodate Intellia's program. The basis for a future estimate will include (a) adding three (3) executive offices in the existing open office area (b) adding a BL2 tissue culture lab numbered 254-A (c) using the existing specialty lab 255 as an analytical lab (d) adding a bacteria lab numbered 261 and (e) adding a tissue culture lab numbered 262.

INFRASTRUCTURE

Add new vacuum pump and new air compressor. Size and location to be determined. Provide new CO2 manifold. Any RODI requirements will be fulfilled with room mounted local systems.

EXECUTIVE OFFICES

The offices will be enclosed utilizing two (2) existing perimeter partitions, two (2) new gypsum wall assemblies, and an interior glazing front equal to existing offices within the space including glass doors. Detail for termination of gypsum wall assemblies at glass will be similar to existing offices within the space. HVAC system will be modified to provide zone control for two (2) zones as they have different exposures. Power outlets will be provided in partitions and ring-and-string will be provided for tel/data work (to be provided by Intellia). Existing flooring and ceilings will be reused and new base will be provided to match existing.

MAIN LAB 254

Reuse existing wall, flooring, casework and ceiling systems. Add two (2) vacuum turrets and two (2) compressed air turrets to sixteen existing ceiling utility panels.

ANALYTICAL LAB 255

Reuse existing wall, flooring, casework and ceiling systems. Evaluate HVAC system and modify as required to accommodate equipment sensible heat loads. Provide plumbing utilities and electrical power as indicated on equipment matrix.

GLASSWASH ROOM 258

Reuse existing wall, flooring, casework and ceiling systems.

TISSUE CULTURE ROOM 254A

The room will be enclosed utilizing two (2) existing partitions, two (2) new gypsum wall assemblies, and one 4'-0" x 7'-0" hollow metal door. Existing floor and ceiling systems to be reused. HVAC system will be modified to accommodate zone control, and equipment-specific heat load. Provide plumbing utilities and electrical power as indicated on equipment matrix.

BACTERIAL LAB 1261

The room will be enclosed utilizing one (1) existing partition, and three (3) new gypsum wall assemblies. Existing floor and ceiling systems to be reused. HVAC system will be modified to accommodate zone control, and equipment-specific heat load. Provide plumbing utilities and electrical power as indicated on equipment matrix.

TISSUE CULTURE LAB II 261

The room will be enclosed utilizing two (2) existing partitions, two (2) new gypsum wall assemblies, and one 4’-0” x 7’-0” hollow metal door. Existing floor and ceiling systems to be reused. HVAC system will be modified to accommodate zone control, and equipment-specific heat load. Power will be provided for equipment needs. Provide new lab sink. Provide plumbing utilities and electrical power as indicated on equipment matrix.

EXHIBIT 4

FORM OF LETTER OF CREDIT

BENEFICIARY:

< >
[LANDLORD]

ISSUANCE DATE:

IRREVOCABLE STANDBY LETTER OF CREDIT NO.

ACCOUNTEE/APPLICANT:

< >
[TENANT]

MAXIMUM/AGGREGATE CREDIT AMOUNT: USD: $.

LADIES AND GENTLEMEN:

We hereby establish our irrevocable letter of credit in your favor for account of the applicant up to an aggregate amount not to exceed and /100 US Dollars ($.) available by your draft(s) drawn on ourselves at sight (i) bearing the clause "Drawn under Irrevocable Standby Letter of Credit Number ," and (ii) including a Beneficiary's dated statement purportedly signed by an authorized signatory or agent reading: "This draw in the amount of U.S. Dollars ($) under your Irrevocable Standby Letter of Credit No. represents funds due and owing to us pursuant to the terms of that certain lease by and between , a , as landlord, and , as tenant (the "**Lease**"), and/or any amendment to the Lease or any other agreement between such parties related to the Lease," and (iii) indicating whether payment should be made by wire transfer (including wiring instructions) or by certified check (including mailing address), accompanied by the original of this Letter of Credit and all amendments, if any. The original Letter of Credit and all amendments, if any, shall be returned to you unless fully utilized.

Unless otherwise stated, all correspondence, documents and sight drafts are to be sent via facsimile to ( ) - with originals to follow by hand delivery with receipted delivery, nationally recognized overnight courier with receipted delivery or certified mail, return receipt requested to our counters at <address>. The date of presentment of any draw shall be the date copies of the Letter of Credit and sight draft are faxed by Beneficiary to <bank>.

You shall have the right to make partial draws against this Letter of Credit, from time to time.

You shall be entitled to assign your interest in this Irrevocable Standby Letter of Credit from time to time to your lender(s) and/or your successors in interest without our approval and without charge. In the event of an assignment, we reserve the right to require reasonable evidence of such assignment as a condition to any draw hereunder.

Except as otherwise expressly stated herein, this Letter of Credit is subject to the "International Standby Practices 1998" promulgated jointly by the Institute for International Banking Law and Practice and the International Chamber of Commerce, effective January 1, 1999.

This Letter of Credit shall expire at our office on , 20 (the "**Stated Expiration Date**"). It is a condition of this Letter of Credit that the Stated Expiration Date shall be deemed automatically extended without amendment for successive one (1) year periods from such Stated Expiration Date, unless at least sixty (60) days prior to such Stated Expiration Date (or any anniversary thereof) we shall send a written notice to you, with a copy to Goulston & Storrs, 400 Atlantic Avenue, Boston, MA 02110, Attention: Colleen P. Hussey and to the Accountee/Applicant, by hand delivery, nationally recognized overnight courier with receipted delivery or by certified mail (return receipt requested) that we elect not to consider this Letter of Credit extended for any such additional one (1) year period. In the event that this Letter of Credit is not extended for an additional period as provided above, you may draw the entire amount available hereunder.

If at any time prior to presentation of documents for payment hereunder, we receive a notarized certificate signed by one who purports to be a duly authorized representative on your behalf to execute and deliver such certificate, stating that this Letter of Credit has been lost, stolen, damaged or destroyed, we will mail you a "Certified True Copy" of this Letter of Credit, which shall be treated by us as an original.

In order to cancel this Letter of Credit prior to expiration, you must return this original Letter of Credit and any amendments hereto to our counters with a statement signed by you stating that the Letter of Credit is no longer required and is being returned to the issuing bank for cancellation. In addition, this Letter of Credit may be canceled prior to expiration upon our receipt of a dated statement purportedly signed by (i) an authorized signatory or agent of the Accountee/Applicant and (ii) an authorized signatory or agent of the beneficiary.

We hereby agree with the drawers, endorsers and bonafide holders that the drafts drawn under and in accordance with the terms and condition of this Letter of Credit shall be duly honored within two (2) business days after the date of presentment.

EXHIBIT 5

ALTERATIONS CHECKLIST

Scope letter describing project, design/construction team, and appropriate vendors.

Insurance certificate(s) for Contractors.

Construction Documents (CDs) - Plans and Specifications - stamped by licensed AIA.

Code Review by licensed code engineer incorporated in CDs and/or by stamped letter.

- Code specific - accessibility.
- Code specific - egress paths/exits (numbers, locations, distance).
- Code specific - fire protection, sprinkler distribution, horns/strobes/signage locations.

Landlord Approved architect, MEPFP engineer, code engineer, structural engineer.

Building permit application.

- Signatures by Architect, Licensed Construction Supervisor.

Cost Affidavit with backup estimate from contractor.

Architect Affidavit.

MEP Affidavit.

FP Affidavit.

Structural Affidavit.

Construction Cost Affidavit.

Structural Affidavit.

Structural Affidavit.

Low Voltage Wiring Within Premises:

Insurance certificate(s) for Contractor, if applicable
If installer is employee, copy of valid government issued electrical license
Code Review by licensed code engineer
permit application as requested by Inspectional Services Department.
- Signature by Licensed Professional (electrician)

Ethernet wiring within Premises:

Insurance certificate(s) for Contractor, if applicable
If installer is employee, copy of valid government issued electrical license (to the extent legally required)
Code Review by licensed code engineer
permit application as requested by Inspectional Services Department.
Signature by Licensed Professional (electrician) to the extent legally required

EXHIBIT 6

TENANT'S HAZARDOUS MATERIALS

Product	CAS#
2-Propanol	67-63-0
Acetic Acid, Glacial	64-19-7
Acetone	67-64-1
Acetonitrile	75-05-8
Acetonitrile, for HPLC, gradient grade, 99.9% (GC)	75-05-8
Ethanol	64-17-5
Ethanol, 190 proof, USP/NF	64-17-5
Ethanol, absolute, 200 proof, 99.5%, A.C.S. reagent	64-17-5
Hydrochloric acid (10%-33%)	None
Hydrogen peroxide, 50 wt. % solution in water	7722-84-1
Isopropyl alcohol	
Methanol	67-56-1
Phosphoric Acid, 99.999+%	None
Potassium acetate, for molecular biology, >=99%	127-08-2
Sodium Hydoxide Solution	None
Sodium hydroxide solutions (more than 10% NaOH)	1310-73-2
Sulfuric Acid, ACS Reagent, 95-98%	7664-93-9
Trichloroacetic acid, SigmaUltra, minimum 99.0%	76-03-9
Trifluoroacetic acid, 99+%, spectrophotometric grade	76-05-1

EXHIBIT 7

RULES AND REGULATIONS

To the extent of any conflict between these Rules and Regulations and the body of the Lease, the body of the Lease shall govern.

1. Tenant and its employees shall not in any way obstruct the sidewalks, halls, stairways, or elevator of the Building, and shall use the same only as a means of passage to and from their respective offices.

2. Corridor doors, when not in use, shall be kept closed.

3. No animals, except seeing eye dogs, shall be brought into or kept in, on or about the Premises, except in connection with the use of the vivarium maintained by Tenant from time to time and Tenant's ordinary and customary laboratory practices.

4. The restroom fixtures shall be used only for the purpose for which they were constructed and no rubbish, ashes, or other substances of any kind shall be thrown into them. Tenant will bear the expense of any damage resulting from misuse.

5. Tenant shall not place any additional lock or locks on any exterior door in the Building or on any door in the Building core within the Premises, including doors providing access to the telephone and electric closets and the slop sink, without Landlord's prior written consent; provided, however, that Tenant shall have control of all keys to doors within the Premises, but will provide Landlord with a master copy of same. At Landlord's option, all keys shall be surrendered to Landlord at the expiration or earlier termination of the Lease.

6. Landlord reserves the right to exclude or expel from the Building any persons who, in the judgment of Landlord, is intoxicated under the influence of liquor or drugs, or shall do any act in violation of the rules and regulations of the Building.

7. Landlord reserves the right to close and keep locked all entrance and exit doors of the Building during the hours Landlord may deem advisable for the adequate protection of the property. Use of the Building and the leased Premises before 8 AM or after 6 PM, or any time during Sundays or legal holidays shall be allowed only to persons with a key/card key to the Premises or guests accompanied by such persons. At these times, all occupants and their guests must sign in at the concierge when entering and exiting the Building. Any persons found in the Building after hours without such keys/card keys are subject to the surveillance of building staff.

8. Tenant shall not, without the prior written consent of Landlord (which consent will not be unreasonably withheld), perform improvements or alterations within the Building or the Premises if the work has the potential of disturbing the fireproofing which has been applied on the surfaces of the structural deck.

9. Landlord and Tenant shall mutually agree on the termite and pest extermination service to control termites and pests in the Premises. Except as included in Landlord's services, tenants shall bear the cost and expense of such extermination services.

10. Tenant shall not install, operate or maintain in the Premises or in any other area of the Building, any electrical equipment which does not bear the U/L (Underwriters Laboratories) or IEC (International Electrotechnical Conference) seal of approval, or which would overload the electrical system or any part thereof beyond its capacity for proper, efficient and safe operation as reasonably determined by Landlord, taking into consideration the overall electrical system, the capacities reserved to Tenant in the Lease, and the present and future requirements therefor in the Building. Tenant shall not use more than Tenant's Building Share of telephone lines available to service the Building, unless Tenant provides its own conduits and service at its sole expense.

11. Tenant shall not operate or permit to be operated on the Premises any coin or token operated vending machine or similar device (including, without limitation, telephones, lockers, toilets, scales, amusement devices and machines for sale of beverages food, candy, cigarettes or other goods), except for those vending machines or similar devices which are for the sole and exclusive use of tenant's employees.

12. Bicycles and other vehicles are not permitted inside or on the walkways outside the Building, except in those areas specifically designated by Landlord for such purposes.

13. Landlord may from time to time adopt appropriate systems and procedures for the security or safety of the Building, its occupants, entry and use, or its contents, provided that Tenant shall have access to the Building 24 hours per day, 7 days a week. Tenant, Tenant's agents, employees, contractors, guests and invitees shall comply with Landlord's reasonable requirements relative thereto.

14. Canvassing, soliciting, and peddling in or about the Building is prohibited. Tenant shall cooperate and use reasonable efforts to prevent the same.

15. At no time shall Tenant permit or shall Tenant's agents, employees, contractors, guests, or invitees smoke in any Common Area of the Building.

16. Tenant shall, at its sole cost and expense: keep any garbage, trash, rubbish and refuse in vermin-proof containers within the interior of the Premises until removed.

17. Landlord and Tenant shall mutually agree on those areas where lab coats are not allowed.

18. Nitrogen tanks must never be left unmanned outside of the Premises.

EXHIBIT 8

LANDLORD'S SERVICES

Common area cleaning and trash removal consistent with first class office and laboratory facilities in the East Cambridge area.

Landscaping

Snow and ice removal

Security

Property management services

Single elevator service meeting the specifications existing on the Execution Date

On-site bicycle parking and shower facilities

Emergency Power: Landlord's sole obligation for either providing emergency generators or providing emergency back-up power to Tenant shall be to: (i) provide an emergency generator for use of one or more tenants in the Building, including Tenant (the "**Back-up Generator**") with five (5) watts of electricity per rentable square foot of the Premises allocated for Tenant's use (Tenant hereby acknowledging that Tenant's equipment to be connected to the Back-Up Generator collectively uses no more than five (5) watts of electricity per rentable square foot of the Premises), and (ii) maintain the Back-up Generator as per the manufacturer's standard maintenance guidelines. In the event that Tenant's equipment connected to the Back-Up Generator uses more than five (5) watts of electricity per rentable square foot of the Premises, Tenant shall, upon Landlord's demand, disconnect from the Back-Up Generator such equipment as may be necessary to reduce Tenant's use to equal or be less than five (5)watts per rentable square foot of the Premises. Landlord shall provide reasonable prior notice of any planned period of replacement, repair or maintenance of the Back-up Generator and within one (1) business day after Landlord learns that the Back-up Generator is not operational, however Landlord shall have no obligation to provide Tenant with an alternative back-up generator or alternative sources of back¬up power. Tenant expressly acknowledges and agrees that Landlord does not guaranty that the Back-up Generator will be operational at all times or that emergency power will be available to the Premises when needed. So long as Landlord is not in default of its obligations under this paragraph, in no event shall Landlord be liable to Tenant or any other party for any damages of any type suffered by Tenant or any other person in the event that any emergency generator or back-up power or any replacement thereof fails or does not provide sufficient power.

EXHIBIT 9

FORM OF SNDA

THIS SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT (this "**Agreement**") is made and entered into as of the day of , 2013 by and between , a with an address of ("**Subtenant**"). , a with an address of ("**Master Lessor**") and , a with an address of ("**Master Tenant**").

WITNESSETH

REFERENCE is hereby made to that certain Master Lease Agreement dated by and between Master Lessor, as landlord, and Master Tenant, as tenant (as it may be amended from time to time, the "**Master Lease**") with respect to the property commonly known as , Cambridge, Massachusetts (as more particularly described in Exhibit A attached hereto, the "**Property**"). A notice of lease with respect to the Master Lease was recorded with the Middlesex South Registry of Deeds in Book , Page .

REFERENCE is also hereby made to that certain lease dated by and between Master Tenant, as landlord, and Subtenant, as tenant (the "**Sublease**"), with respect to a portion of the Property consisting of approximately rentable square feet on the floor (the "**Subleased Premises**") of the building commonly known as , Cambridge, MA; and

WHEREAS, subject to the terms and conditioned hereinafter set forth, Master Lessor has agreed (a) to recognize the rights of Subtenant under the Sublease, and (b) not to disturb Subtenant's use and enjoyment of the Subleased Premises.

NOW, **THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Incorporation of Recitals; Capitalized Terms. The foregoing recitals are hereby incorporated by reference. All capitalized terms not otherwise defined herein shall have the meanings ascribed to them as set forth in the Master Lease.

2. Sublease. Master Tenant and Subtenant each hereby warrants and represents that the copy of the Sublease delivered to Master Lessor is a true, complete and accurate copy of the Sublease, as amended to date.

3. Subordination. The Sublease is and shall be subject and subordinate to the Master Lease and all amendments and modifications thereof. The subordination described herein is intended by the parties to have the same force and effect as if the Master Lease and such amendments and/or modifications had been executed, acknowledged, delivered and recorded prior to the Sublease and any amendments or modifications thereof.

4. Subtenant Not To Be Disturbed. So long as Subtenant is not in default (beyond any period given Subtenant by the terms of the Sublease to cure such default) in the payment of rent or additional rent or of any of the terms, covenants or conditions of the Sublease on Subtenant's part to be performed, (a) Subtenant's possession of the Subleased Premises, and its rights and privileges under the Sublease, including but not limited to any extension or renewal rights, if any, shall not be diminished or interfered with by Master Lessor, and (b) Master Lessor will not join Subtenant as a party defendant in any action or proceeding terminating Master Tenant's possession of the Property unless such joinder is necessary to terminate such possession and then only for such purpose and not for the purpose of terminating the Sublease. Master Lessor acknowledges and agrees that the prohibition contained in Section 1.45 of the Master Lease against "animal raising or storage" would not prohibit the use of the Premises for vivarium purposes in any respect.

5. Tenant To Attorn To Master Lessor. If the Master Lease is terminated pursuant to the terms thereof, or if Master Tenant rejects the Sublease in the course of a bankruptcy proceeding, or if Master Lessor shall succeed to the interest of Master Tenant in and to the Sublease in any other manner, then (a) the Sublease shall continue in full force and effect as a direct lease between Master Lessor and Subtenant (subject to Section 9 below); provided, however, that Master Lessor and its assigns shall not be (i) liable for any misrepresentation, act or omission of Master Tenant, provided, however, that the foregoing shall not release Master Lessor from liability for any default of its obligations under the Sublease continuing after the date on which Master Lessor succeeds to Landlord's interest hereunder, including without limitation any maintenance obligations, (ii) subject to any counterclaim, demand or offset which Subtenant may have against Master Tenant; (iii) liable for the return of any security deposit or letter of credit not actually received by Master Lessor and with respect to which Subtenant agrees to look solely to Master Tenant for refund or reimbursement; (iv) unless delivered by Master Tenant to Master Lessor, bound by any advance payment of rent or additional rent or any other sums made by Subtenant to Master Tenant, except for rent or additional rent applicable to the then-current month; (v) obligated to cure any defaults under the Sublease of Master Tenant which occurred prior to the termination of the Master Lease, provided, however, that the foregoing shall not release Master Lessor from liability for any default of its obligations under the Sublease continuing after the date on which Master Lessor succeeds to Landlord's interest hereunder, including without limitation any maintenance obligations; or (vi) bound by any covenant to undertake, complete or pay for any improvements to the Subleased Premises other than to the extent set forth in Section 3 of the Sublease; and (b) Subtenant shall attorn to Master Lessor as its landlord, said attornment to be effective and self-operative without the execution of any further instruments. Master Lessor and Subtenant each hereby agrees to execute an instrument in form and substance reasonably acceptable to both parties acknowledging the continuation of the Sublease for the Subleased Premises as a direct lease for the Subleased Premises on the terms and conditions set forth in this Agreement. In addition, Subtenant shall execute and deliver, upon the request of Master Lessor, an instrument or certificate regarding the status of the Sublease consisting of statements, if true (and if not true, specifying in what respect), in the case of the Sublease by Subtenant (A) that the Sublease is in full force and effect, (B) the amounts and date through which rentals have been paid, (C) the commencement date, rent commencement date and duration of the term of the Sublease, (D) that no default, or state of facts, which with the passage of time, or notice, or both, would constitute a default, exists on the part of either party to the Sublease, and (E) the dates on which payments of additional rent, if any, are due under the Sublease.

6. Sublease Amendments. Master Lessor shall not be bound by any amendment to the Sublease made after the date hereof unless Master Lessor shall have consented thereto in writing. Such consent of Master Lessor may be withheld by Master Lessor in its sole and absolute discretion if such amendment (a) reduces the rent payable under the Sublease, (b) provides for any expansion rights, (c) extends the term of the Sublease in addition to Subtenant's current right(s) to extend the term under the Sublease, if any. Any such amendment made without Master Lessor's consent shall not be binding on Master Lessor.

7. Master Lessor's Right to Notice and Cure. Subtenant covenants and agrees to: (a) concurrently give Master Lessor the same default and/or termination notices given to Master Tenant under the Sublease at the following address(es) until otherwise specified in writing by Master Lessor: , Attention: ; (b) provide Master Lessor with at least ten (10) days plus the number of days (and the same opportunities and rights) as are available to Master Tenant under the Sublease to cure any of Master Tenant's defaults thereunder; and (c) accept Master Lessor's curing of any of Master Tenant's defaults under the Sublease as performance by Master Tenant thereunder.

8. Amendments. This Agreement may not be waived, changed, or discharged orally, but only by agreement in writing and signed by Master Lessor, Master Tenant and Subtenant, and any oral waiver, change, or discharge of this Agreement or any provisions hereof shall be without authority and shall be of no force and effect.

9. Revisions to Sublease. Notwithstanding anything contained in this Agreement or the Sublease to the contrary, in the event that the Master Lease is terminated pursuant to the terms thereof, or if Master Tenant rejects the Sublease in the course of a bankruptcy proceeding, (a) as of the date of such termination or rejection, Master Lessor and Master Lessor's successors and assigns shall have no liability to Subtenant with respect to any representations and warranties on the part of "Landlord" contained in the Sublease (provided that the foregoing shall in no event relieve Master Tenant of any liability to Subtenant with respect to such representations and warranties), and (b) neither Master Lessor nor Subtenant shall have any liability or obligations pursuant to the brokerage provision of the Sublease.

10. Relation between Master Lessor and Master Tenant. Notwithstanding anything to the contrary contained herein, if at the time that Master Lessor succeeds to the interest of Master Tenant as landlord under the Sublease, Master Tenant controls, is controlled by or is under common control with Master Lessor, then, in such event, Master Lessor agrees that no term, covenant or condition of this Agreement shall be interpreted or enforced by Master Lessor in any manner that would have the effect of amending or modifying the Sublease, releasing Master Lessor from any obligation under the Sublease or otherwise reducing the obligations of the landlord thereunder or increasing the obligations of Tenant thereunder (for example, Section 9(a) above shall not be enforced by Master Lessor in such situation).

11. Miscellaneous. This Agreement shall be deemed to have been executed and delivered within the Commonwealth of Massachusetts, and the rights and obligations of the

parties hereunder shall be construed and enforced in accordance with, and governed by, the laws of the Commonwealth of Massachusetts without regard to the laws governing conflicts of laws. If any term of this Agreement or the application thereof to any person or circumstances shall be invalid and unenforceable, the remaining provisions of this Agreement, the application or such term to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected. This Agreement is binding upon and shall inure to the benefit of Master Lessor, Master Tenant and Subtenant, their respective successors and assigns. Each party has cooperated in the drafting and preparation of this Agreement and, therefore, in any construction to be made of this Agreement, the same shall not be construed against either party. In the event of litigation relating to this Agreement, the prevailing party shall be entitled to reimbursement from the other party of its reasonable attorneys' fees and costs. This Agreement constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions, and may not be amended, waived, discharged or terminated except by a written instrument signed by all the parties hereto.

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have each caused this Agreement to be executed as an instrument under seal as of the date first above written.

MASTER LESSOR:

<>

By: _____
Name:
Title:

MASTER TENANT:

<>

By: _____
Name:
Title:

SUBTENANT:

<>

By: _____
Name:
Title:

[NOTE: ACKNOWLEDGEMENT PAGE TO BE ATTACHED TO EXECUTION VERSION.]

EXHIBIT A

LEGAL DESCRIPTION OF PROPERTY

EXHIBIT 9 PAGE 6

EXHIBIT 21.1

Subsidiaries of the Parent

None.