UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO**

Commission File Number 001-38470

Unity Biotechnology, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware	**26-4726035**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
285 East Grand Ave.	
South San Francisco, CA	**94080**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (650) 416-1192

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001	UBX	The Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ☐ NO ☒

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES ☐ NO ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). YES ☒ NO ☐

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant has filed a report on and attestation to its management assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on The Nasdaq Global Select Market on June 30, 2020, was $326,317,326.

The number of shares of Registrant's Common Stock outstanding as of March 19, 2021 was 54,699,491.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Definitive Proxy Statement relating to the 2021 Annual Meeting of Shareholders, scheduled to be held on June 24, 2021, are incorporated by reference into Part III of this Report. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the end of the fiscal year covered by this Annual Report on Form 10-K.

Table of Contents

Forward-Looking Statements

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical facts contained in this Annual Report on Form 10-K are statements that could be deemed forward-looking statements reflecting the current beliefs and expectations of management with respect to future events or to our future 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. These statements are often identified by the use of words such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "due," "estimate," "expect," "goal," "if," "intend," "may," "objective," "plan," "predict," "potential," "positioned," "seek," "should," "target," "will," "would," "until," and similar expressions or variations. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- our expectations regarding the potential benefits, activity, effectiveness, and safety of our drug candidates;
- our expectations with regard to the results of our clinical studies, preclinical studies, and research and development programs, including the timing and availability of data from such studies;
- our preclinical, clinical, and regulatory development plans for our drug candidates, including the timing or likelihood of regulatory filings and approvals for our drug candidates;
- our expectations with regard to our ability to acquire, discover, and develop additional drug candidates and advance such drug candidates into, and successfully complete, clinical studies;
- our expectations regarding the potential market size and size of the potential patient populations for our drug candidates, if approved for commercial use;
- our intentions and our ability to establish collaborations and/or partnerships;
- the timing and amount of any milestone payments we are obligated to make pursuant to our existing license agreements and any future license or collaboration agreements that we may enter into;
- our commercialization, marketing, and manufacturing capabilities and expectations;
- our intentions with respect to the commercialization of our drug candidates;
- the pricing and reimbursement of our drug candidates, if approved;
- the implementation of our business model and strategic plans for our business and drug candidates, including additional indications which we may pursue;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates, including the projected terms of patent protection;
- estimates of our expenses, future revenue, capital requirements, our needs for additional financing, and our ability to obtain additional capital;
- our anticipated use of proceeds from our initial public offering;
- our future financial performance;
- developments and projections relating to our competitors and our industry, including competing therapies; and
- other risks and uncertainties, including those listed under the caption "Risk Factors."

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Annual Report on Form 10-K.

Forward-looking statements 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 the forward-looking statements. We discuss these risks in greater detail in "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Given these uncertainties, you should not place undue

reliance on these forward-looking statements. Also, forward-looking statements represent our management's beliefs and assumptions only as of the date of this Annual Report on Form 10-K. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

This Annual Report on Form 10-K also contains estimates, projections, and other information concerning our industry, our business and the markets for certain drugs, including data regarding the estimated size of those markets, their projected growth rates, and the incidence of certain medical conditions. Information that is based on estimates, forecasts, projections or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from reports, research surveys, studies, and similar data prepared by third parties, industry, medical and general publications, government data, and similar sources. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

Trademarks

This Annual Report on Form 10-K includes trademarks, service marks, and trade names owned by us or other companies. All trademarks, service marks and trade names included in this Annual Report on Form 10-K are the property of their respective owners.

PART I

Item 1. Business.

Overview

Our mission is to slow, halt, or reverse diseases of aging. Our initial focus is on creating senolytic medicines to selectively eliminate senescent cells and thereby treat diseases of aging, such as ophthalmologic and neurologic diseases.

Diseases of aging cause considerable economic, personal, and societal burden. As individuals age, the prevalence of chronic disease increases, with 80% of older Americans having at least one chronic disease and 50% having two or more. Diseases of aging negatively impact quality of life, are typically chronic, and progress from the time of onset until death. It is estimated that providing healthcare for people over the age of 65 costs four to five times more than for younger individuals. According to the United States Census Bureau, this elderly population of Americans is expected to increase nearly 50% by 2050, increasing the economic burden of aging dramatically. Any success increasing longevity without treating underlying diseases of aging would only serve to increase this burden.

We believe that by creating medicines that target fundamental aging mechanisms, we can reduce the economic, personal, and societal burden of aging and enhance quality of life.

Targeting Cellular Senescence and Other Biologies of Aging

We believe that the accumulation of senescent cells is a fundamental mechanism of aging and a driver of many common diseases of aging. Cellular senescence is a natural biological state in which a cell permanently halts division. These cells are referred to as senescent. Senescent cells accumulate with age, secreting large quantities of more than 100 proteins, including inflammatory factors, proteases, fibrotic factors, and growth factors, that disturb the tissue micro-environment. This collection of secreted proteins is referred to as the Senescence Associated Secretory Phenotype, or SASP. In addition to its effects on tissue function, the SASP contains factors that induce senescence in neighboring cells, setting off a cascade of events that culminates in the formation of the functionally aged and/or diseased tissue that underlies a variety of age-related diseases.

We are developing senolytic medicines to eliminate senescent cells and thereby lower the production of the SASP, which we believe addresses a root cause of age-related diseases. Many existing therapeutics, such as antibodies, target single SASP factors, but fail to remove the cells that continually produce these factors. By stopping the production of the SASP at it source, we believe senolytic medicines could have a more durable impact by slowing, halting, or reversing particular diseases of aging, and shift the treatment paradigm from chronic to intermittent dosing. Less frequent dosing may also improve drug tolerability and patient adherence.

While our primary focus is on programs targeting cellular senescence, we are exploring other biologies of aging that may have a major impact on diseases of aging. For instance, we have a preclinical program targeting Tie2 signaling in the eye. Tie2 is a receptor tyrosine kinase that is implicated in regulating barrier function in blood vessels of the eye, which are affected in several prevalent eye diseases. We also have a preclinical program based on α-Klotho, a protein that has been implicated in human cognition and may provide benefits in age-related cognitive dysfunctions.

Our Pipeline

We are developing a portfolio of programs targeting specific biological mechanisms implicated in diseases of aging. Our core therapeutic approach targets cellular senescence, and we are currently advancing senolytic programs in ophthalmologic and neurologic disorders. Our clinical development strategy is to focus initially on the development of senolytic medicines designed to be administered locally into diseased tissue. After demonstrating efficacy in indications amenable to localized therapy, we plan to pursue the development of senolytic medicines that could be administered systemically to treat additional diseases of aging. In addition to our efforts to eliminate senescent cells, we are also advancing other programs based on other biologies of aging including an agonistic antibody to the Tie2 receptor to treat vascular eye disease and α-Klotho hormone to treat cognitive disorders.

Our current pipeline of programs is illustrated below:

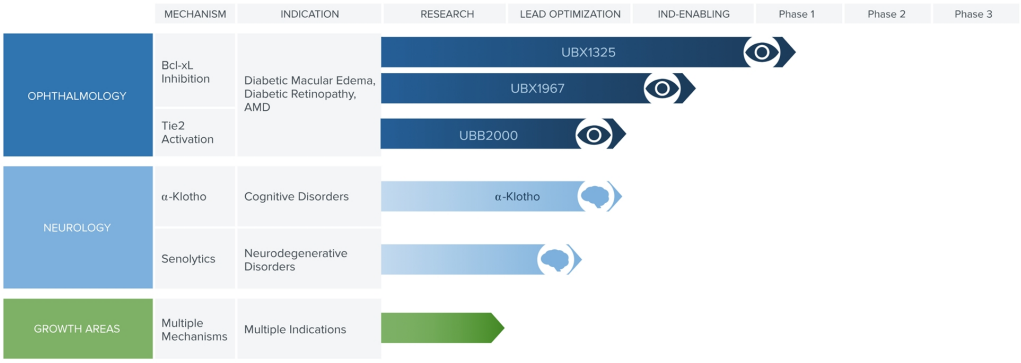


Figure 1: UNITY pipeline as of January 2021

Ophthalmology Program

UBX1325 is our most advanced lead drug candidate for age-related diseases of the eye, including age-related macular degeneration, or AMD, diabetic macular edema, or DME, and diabetic retinopathy. UBX1967 is our back-up compound to UBX1325. Both of these drug candidates are potent small molecule inhibitors of Bcl-xL, a member of the Bcl-2 family of apoptosis regulating proteins, each of which have shown distinct tissue residence time profiles in preclinical studies. UBX1325 and UBX1967 are designed to inhibit the function of proteins that senescent cells rely on for survival. In our preclinical studies, we have demonstrated that targeting Bcl-xL with UBX1325 and UBX1967 preferentially eliminated senescent cells from diseased tissue while sparing cells in healthy tissue. In July 2020, we filed an Investigational New Drug application, or IND, to commence a Phase 1 study of UBX1325. We initiated a Phase 1 clinical study of UBX1325 in patients with DME and AMD. The first patient was dosed in October 2020 and we expect to obtain initial results from this study in the first half of 2021.

Under our current amended license agreement with Ascentage Pharma Group Corp. Limited, or Ascentage, we have, among other things, exclusive worldwide development and commercialization rights and non-exclusive manufacturing rights to UBX1325 outside of Greater China (China, Hong Kong, Macau and Taiwan) in all non-oncology indications. Inside Greater China, we will be obligated to develop, manufacture and commercialize UBX1325 through a joint venture with Ascentage. See "—Licenses and Collaborations."

UBX2050 is our investigational, fully human anti-Tie2 agonist monoclonal antibody, which we are developing for the treatment of age-related eye diseases. UBX2050 is derived from an asset that was acquired from Achaogen, Inc. in June 2020 through an Asset Purchase Agreement. UBX2050 was selected based on its potential to activate the Tie2 receptor in vitro and has demonstrated encouraging activity in preclinical models of ocular disease. We anticipate that IND-enabling activities will commence in the second half of 2021.

Neurology Program

UBX2089, or α-Klotho hormone drug candidate, is a circulating hormone primarily produced in the kidneys and choroid plexus of the brain, which we are researching for multiple neurology indications. Human genetic evidence links α-Klotho to cognitive function, and we have observed pro-cognitive activity of recombinant α-Klotho in multiple preclinical rodent and non-human primate models. We are investigating the effect of UBX2089 on engaging CNS circuits in preclinical animal models with the intent of advancement to clinical studies.

We believe cellular senescence may play a fundamental role in neurodegeneration. Multiple lines of evidence suggest that senescent cells accumulate in the nervous system during normal aging and neurodegenerative diseases such as Alzheimer's, Parkinson's and Amyotrophic Lateral Sclerosis. Several third-party preclinical proof of

concept studies in mouse models of aging and neurodegeneration have provided preliminary evidence that the removal of senescent cells via senolytic drugs or genetic methods have the potential to improve brain function. We are currently pursuing our lead senolytic targets in multiple neurology indications.

Our Strategy

Our goal is to develop transformative therapies for diseases of aging. We plan to achieve this goal by targeting the fundamental biology of aging to slow, halt, or reverse specific diseases of aging. Our primary approach is to target cellular senescence by developing senolytic medicines. In addition, we dedicate resources and effort to better understanding fundamental aging mechanisms and translating these insights into human medicines. This pioneering work has been supported by valuable collaborations with leading academics. By investing early in the science of aging, we believe we are positioned to translate the field of aging biology from fundamental scientific insights to the development and commercialization of medicines. Our core strategies to achieve this objective include:

- ***Demonstrating in our clinical studies that local treatment with senolytic medicines can alter the course of age-related diseases***. We believe that local treatment with senolytic medicines has the potential to slow, halt, or reverse aspects of aging. If we prove this concept in a localized setting, we will be well-positioned to expand upon that success with additional applications.
- ***Continuing research into the development of systemic senolytic medicines***. We believe that harnessing the full potential of senolysis, or the selective elimination of senescent cells, to alter many diseases of aging will require systemic senolytic medicines. We are exploring the development of systemic senolytic medicines using multiple modalities, including small molecules, antisense oligonucleotides, and biologics.
- ***Targeting aging mechanisms beyond cellular senescence***. While senolysis has been shown to affect the course of multiple diseases of aging, we believe achieving our broader goal of slowing, halting, or reversing specific diseases of aging will require intervention in additional aging mechanisms beyond cellular senescence. We will continue to conduct fundamental research into these other aging mechanisms, including the use of a Tie2 receptor agonist in eye diseases and α-Klotho hormone in cognitive disorders. We will also continue to partner with the most forward-thinking aging researchers in the world to foster a collaborative environment to bring their insights, innovation, and technologies into our powerful research and drug development infrastructure.
- ***Leveraging our core science and biotechnology experience***. We strive to attract, retain, and incentivize a unique team with significant strengths and experience in basic science, biotechnology, medicinal chemistry, and clinical development. Over the last ten years, our team has identified mechanisms that can selectively eliminate senescent cells, created potent senolytic molecules, and developed proprietary animal models to monitor senescent cell clearance. We have developed significant insight into the relationship between the accumulation of senescent cells and human disease. Further, our management team has extensive biotechnology and pharmaceutical experience and has played a leadership role in the creation of numerous FDA-approved medicines.
- ***Opportunistically expanding our product portfolio***. Our internal research has identified multiple biological pathways that are potential targets for diseases of aging. We will search for opportunities to in-license novel medicines and technology platforms that we can rapidly advance into clinical development. We expect that our current leadership in the field of cellular senescence biology will serve as a foundation for us to develop numerous products to treat human disease.
- ***Continuing to build a robust and defensible patent portfolio***. We are an innovative biotechnology company focused on developing novel insights into the biology of diseases of aging. Our current patent portfolio consists, on a worldwide basis, of more than 150 patents and pending applications in the United States and in foreign jurisdictions. This includes 43 issued and allowed U.S. patents and patent applications and 32 granted and allowed foreign patents and applications respectively. We intend to continue to aggressively develop, file, and pursue additional patent protection for our innovative technologies and products.

Our Approach to Slowing, Halting, or Reversing Diseases of Aging

Targeting Cellular Senescence

Cellular senescence is a natural biological state in which a cell permanently halts division. Cells become senescent when they experience some form of unresolvable cellular stress. These cellular stress events result in the activation of the tumor suppressor protein p53, which drives the production of two cell-cycle dependent kinase inhibitors, or CDK inhibitors, p21 and p16. These two molecules are required for the establishment and subsequent maintenance of the senescent cell state. The first CDK inhibitor to be produced is p21, which works through subsequent pathways to block the production of numerous proteins that cells need to divide. The initial p21-driven signal is an acute response to cell damage and eventually decreases. In contrast, p16 permanently locks the cell into a non-dividing state and the production of p16 continues as long as the cell lives. Given that p16 production, in most cases, continues indefinitely and is believed to be produced almost exclusively in senescent cells, it is a widely used marker to identify and quantify senescent cells.

The process through which stress mechanisms can induce cells to become senescent is illustrated in the figure below.

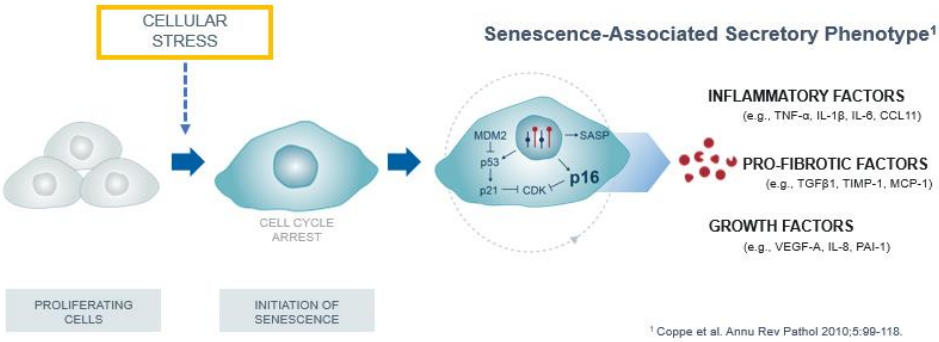


Figure 2: Illustration of induction of the senescent state and secretion of factors that can damage the microenvironment

How Senescent Cells Drive Diseases of Aging

Once cells become senescent, they begin secreting large quantities of proteins, including pro-inflammatory factors that recruit the immune system, proteases that remodel the extra-cellular matrix, pro-fibrotic factors that drive the formation of dysfunctional matrix, and growth factors that perturb the function of the tissue micro-environment. This collection of secreted proteins is referred to as the Senescence Associated Secretory Phenotype, or SASP. In addition to affecting normal tissue function, the SASP contains factors that induce senescence in neighboring cells, setting off a cascade of events that ultimately culminates in the formation of a functionally aged and/or diseased tissue that underlies a variety of age-related diseases.

Numerous SASP factors have been implicated as potentially contributing to human disease and it is now believed that the SASP is the primary means by which senescent cells drive specific diseases of aging. For example, a variety of single SASP factors (e.g., TNF-α and VEGF-A) have been demonstrated to drive human diseases by themselves and have been the target of well-known antibody therapeutics, including HUMIRA® and EYLEA®. While these antibodies are able to modify human disease by removing the activity of a single factor, we believe the clearance of senescent cells will remove the source of numerous SASP factors, providing improvement in both efficacy and duration-of-effect.

Our Therapeutic Paradigm

We were founded on the principle that the selective elimination of senescent cells and their accompanying SASP has the potential to slow, halt, or reverse diseases of aging. Our insights into senescent cell biology allow us to identify senescence-driven diseases, target the senescent cells driving a particular disease, and selectively eliminate these cells. The figure below illustrates this process.

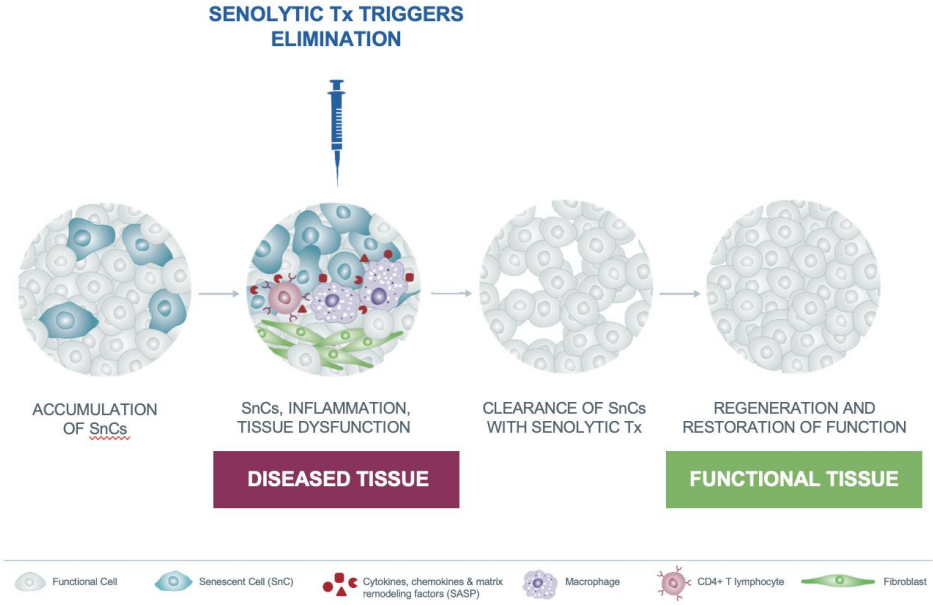


Figure 3: Illustration of the senolytic therapeutic hypothesis

In developing this approach, we have acquired significant expertise with respect to senescent cell survival pathways, which are the signaling systems that senescent cells rely on for survival. When these pathways are targeted with specifically designed molecules, senescent cells undergo programmed cell death. Through our research, we have identified several of these mechanistically distinct survival pathways, which differ depending on cell type and the tissue in which the senescent cells reside.

Advantages of Our Approach

We believe that senolytic medicines that selectively eliminate senescent cells from diseased tissues may have several advantages over other efforts to treat diseases of aging:

- ***Senolytic medicines target a root cause of diseases of aging.*** We believe that the accumulation of senescent cells is a root cause of many diseases of aging. Unlike treatments that inhibit the activity of a single factor (such as antibodies targeting single pro-inflammatory proteins), we believe a senolytic medicine that eliminates accumulated senescent cells and consequently also their associated SASP, could blunt the activity of numerous factors contributing to disease. As a result, senolytic medicines could have improved efficacy because they target diseases at their source and therefore may be able to normalize tissue levels of numerous disease-causing factors simultaneously.
- ***Senolytic medicines can be dosed intermittently***. The administration of senolytic medicines would remove senescent cells from diseased tissue. As new senescent cells may take months or perhaps years to re-

accumulate, senolytic medicines could potentially be dosed infrequently. Intermittent dosing may also improve drug tolerability and patient adherence when compared to chronic therapies.

- ***Senolytic medicines restore tissues to a healthy state.*** We believe senescent cells generally do not accumulate in young individuals and that the accumulation of senescent cells in older individuals interferes with normal tissue function. Our goal for the administration of senolytic medicines is to restore tissue to a functionally younger state.

Our Discovery and Development Strategy

We believe that each of our senolytic programs has the potential to address a root cause of an age-related disease. Our clinical development strategy is initially to develop senolytic medicines designed to be administered locally into diseased tissue, which reduces systemic toxicological risks by limiting drug exposure primarily to the treated tissue. Our initial focus is on ophthalmologic and neurologic diseases. After demonstrating safety and efficacy in indications amenable to localized therapy, we plan to pursue the development of senolytic medicines that could be administered systemically, initially acting on specific tissues for which direct local administration is challenging. Ultimately, we envision the potential for systemic administration of senolytic medicines to selectively eliminate senescent cells throughout the body to treat diseases of aging that are not amenable to local treatment, such as liver and kidney disease.

In addition to developing therapeutics to target senescent cells, we are also exploring other mechanisms that contribute to diseases of aging. These drug discovery programs include a Tie2 receptor agonistic antibody designed to treat eye disease and α-Klotho hormone to treat cognitive disorders.

Our Programs

Ophthalmology Programs Targeting Cellular Senescence

Unmet Need and Therapeutic Rationale

The majority of significant eye diseases are age-related, with the prevalence of vision-threatening disease increasing significantly over the age of 75. Of the 285 million individuals worldwide living with visual impairment, 65% are over the age of 50. The individual diseases that are associated with these figures include age-related macular degeneration, diabetic macular edema, and diabetic eye diseases, all of which have a high prevalence and significant unmet need in either prevention or therapeutic options. The diseases we are evaluating as initial target indications for local administration of senolytic therapy in the eye are age-related macular degeneration, diabetic macular edema, and diabetic retinopathy.

Diabetic Macular Edema

Diabetic macular edema is a condition in which the metabolic abnormalities associated with diabetes, including high levels of blood glucose, or hyperglycemia, damage blood vessels in the central portion of the retina, or the macula, causing those vessels to leak fluid. The leaking fluid leads to swelling and subsequently to abnormalities of vision. The prevalence of diabetic macular edema, or DME, in the United States ranges from approximately 4.0% to 6.8% of people with diabetes who are 40 years of age or older. In 2019, it was estimated that more than 20 million people worldwide are affected by DME. There is a high burden of DME among non-Hispanic blacks and robust associations with higher hemoglobin A1c and longer duration of underlying diabetes.

Despite the success achieved with anti-VEGF treatment for retinal disease like AMD that involve the proliferation of abnormal blood vessels, or neovascularization, the impact of such treatment in DME has been more limited. This is due to the challenging nature of the therapeutic regimen (which entails monthly and or bimonthly IVT injections for up to two years), the number of cases that are refractory to anti-VEGF treatment (approximately 50% of DME patients), and the long-term complications of increased ischemia and retinal fibrosis associated with long-term treatment with anti-VEGF injections. As a result, there is an unmet need in this group of patients.

Although VEGF has been identified as a major factor for neovascular disease, other factors, which we believe include SASP factors, are present in DME, including IL-1ß, TNF-a, IL-6, and TGF-ß, among others. Due to the multifactorial nature of the disease, a significant opportunity exists to develop a more comprehensive approach to the treatment of DME, such as senolysis, that targets the root cause of the disease.

Age-Related Macular Degeneration

Age-related macular degeneration, or AMD, is the leading cause of irreversible vision loss in developed countries, particularly in people older than 60 years. In 2014, it was projected that by 2020 the number of people worldwide with AMD would be 196 million and could increase to 288 million by 2040. The prevalence of AMD increases significantly with advancing age, with a prevalence rate of 1.63% in those aged 65 to 69 years which increases to 11.73% in those aged 80 years or older. AMD affects central vision, impairing functions such as reading, driving, and facial recognition, and has a major impact on quality of life and the ability to live independently. AMD is defined in three stages: (i) “early,” in which visual function is affected in the presence of signs of age-related changes in the retina such as drusen and pigmentary changes; (ii) “intermediate,” in which increasing degrees of macular lipid deposition and structural changes are noted; and (iii) “late,” in which central vision is compromised due to abnormal blood vessel growth (known as “wet” AMD) or advanced atrophy of the retina (known as “dry” AMD). AMD is a heterogenous, complex, multifactorial disease, with inflammatory, degenerative, genetic, and vascular factors all contributing to its development and progression. The potential role of senescent cells and the associated SASP in driving the two main presentations of the disease, both wet and dry forms, could prove a unifying mechanism across this complex disorder.

Current standard of care for AMD is the administration of anti-vascular endothelial growth factor, or anti-VEGF, antibody drugs which control aspects of the wet form of the disease only. The development of therapeutic options for dry AMD has proven to be challenging and currently there are no approved therapies available to halt progression or reverse disease. And while wet AMD has been significantly impacted by anti-VEGF therapy, that approach is limited by the need for frequent eye injections over a long period of time, a significant percentage of patients not completing or being non-responsive or poorly-responsive to anti-VEGF therapy, and the contribution of multiple other mechanisms at play in the disease beyond VEGF. Thus, there is considerable potential for a senolytic approach to impact disease progression and achieve stabilization in AMD via modulation of senescent cell burden and the accompanying SASP. SASP factors in AMD include molecules that promote abnormal blood vessel growth, inflammation, and fibrosis, all of which have been implicated in various stages of the disease. We believe that a senolytic medicine could have a meaningful and prolonged impact on the AMD disease state and help restore the cellular microenvironment to a more normal, pre-senescent state.

Diabetic Retinopathy

Diabetic retinopathy, or DR, is estimated to affect over 90 million people globally and approximately 28 million have vision-threatening stages of disease. It is a leading cause of vision loss in middle-aged and elderly people and impacts 8% of the U.S. population over age 65. Due to the increasing diabetic population arising from lifestyle changes in developing countries, the disease incidence is predicted to climb.

Diabetic retinopathy is a complex multifactorial disease, characterized by progression through a series of stages of increasing severity. The metabolic abnormalities associated with diabetes incite a variety of inflammatory and metabolic stress-induced events which leads to proliferation of new blood vessels and subsequent bleeding and swelling, which in turn causes scarring and vision loss or may lead to blood vessel occlusion, limiting blood flow and leading to damage to the retinal photoreceptors and nerves supplied by those vessels. The risk of developing diabetic retinopathy and its severity increase with the duration of underlying diabetes. It is also associated with poor glycemic control and the presence of additional coexistent diseases, such as high blood pressure, high cholesterol levels, and impaired kidney function.

Current standard of care for diabetic retinopathy, which includes blood sugar control, anti-VEGF drugs, steroid injections, and laser therapy, is modestly effective. The limitations of existing therapy include general challenges with achieving diabetes control, the need for frequent intravitreal injections for the administration of anti-VEGF therapy, a significant percentage of patients not completing or being non-responsive to anti-VEGF therapy,

and tissue destruction with permanent side effects from laser therapy. This presents a significant opportunity to design and develop a treatment paradigm, such as senolysis, that treats a root cause of the disease.

Evidence suggests that diabetic retinopathy is driven by the accumulation of senescent cells that are a direct result of elevated glucose levels in patients with diabetes. These senescent cells are triggered by local stresses in the retina and their accumulation drives the production of the accompanying ocular SASP factors, VEGF and platelet-derived growth factor, or PDGF. Overproduction of VEGF and IL-6 leads to ocular inflammation and abnormal blood vessel growth, key signatures of diabetic retinopathy. Thus, a senolytic approach could target multiple aspects of the underlying causes of diabetic retinopathy and ideally lead to greater therapeutic coverage in a wider range of patients. This elimination of senescent cell accumulation and accompanying SASP factors could limit further disease progression, reduce vessel leakage and inflammation, and prevent vision loss.

Evidence for Senescence Burden in Human Disease and Human Biomarker Discovery: AMD, DR and DME

We evaluated the presence of senescent cells by IHC staining for p16 in post-mortem retinal donor tissue from individuals who carried a pre-mortem diagnosis of AMD, DR/DME, or neither. We believe the resulting data support our hypothesis that the accumulation of senescent cells is linked to AMD and DR/DME. Quantification of IHC images indicated a significant increase in senescent cell burden (as measured by $p16^+$ cells) in both AMD and DR patient globes (Figure 4).

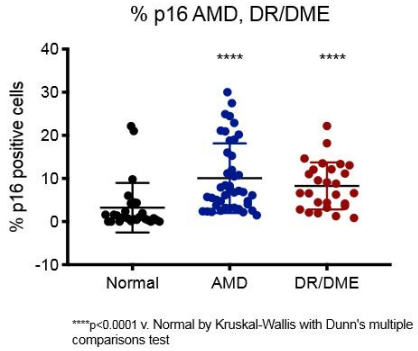


Figure 4: Quantification of senescent cell burden in AMD and DR/DME

We also compared the presence of senescence in human retinal microvascular endothelial cells, or HRMEC, versus retinal donor tissue from human DME/DR patients by evaluating the gene expression of several disease-relevant factors. Quantitative polymerase chain reaction, or qPCR, demonstrated elevations in the SASP factors VEGF, PDGF, IL1B, and TNF in senescent HRMEC, relative to non-senescent cells. These disease-relevant mediators have been reported to be elevated in DME/DR patients. We believe this data is consistent with our hypothesis that senescent cell accumulation and SASP factors play a central role in both DME and DR.

Mechanism of Action of UBX1325 and UBX1967 (Inhibitors of the Bcl-2 Family)

UBX1325, our lead drug candidate, and UBX1967, our back-up compound, in our ophthalmology program, are potent small molecule inhibitors of specific members of the Bcl-2 family of apoptosis regulating proteins. The B-cell lymphoma 2, or Bcl-2, gene family encodes more than 20 proteins that regulate the intrinsic apoptosis pathway and are fundamental to the balance between cell survival and cell death. Inhibition of certain Bcl-2 family proteins results in cell death in certain cell types. Targeting this pathway has been studied extensively in connection with the search for new oncology medicines.

In Vitro and In Vivo Pharmacology Studies with UBX1325

We conducted an *in vitro* assessment of binding and efficacy of UBX1325 to determine both its potency for the Bcl-2 family protein targets and its potency at eliminating senescent cells. Biochemical assays for Bcl-2, Bcl-xL, and Bcl-w yielded binding affinities in the sub-nanomolar range. UBX1325 is a phosphate pro-drug that releases the active parent molecule known as UBX0601. In order to assess the activity of UBX0601 on senescent cells, we used a cell-based assay with radiation-induced senescence. Senescent cells were exposed to increasing concentrations of UBX0601 for 72 hours. In this study, UBX0601 showed potent, concentration-dependent senolytic activity against human foetal lung cells, or IMR90, primary human umbilical vein endothelial cells, or HUVEC, and HRMEC as measured by reduction of senescent cell survival. UBX0601 also demonstrated selectivity for elimination of senescent HRMEC over non-senescent HRMEC which is observed as decreased potency in the non-senescent HRMEC (Figure 5).

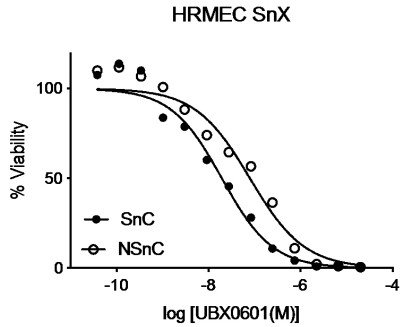


Figure 5: Concentration- dependent induction of apoptosis in HRMEC cells by UBX0601 in vitro

We next studied the effects of UBX1325 in the retina in an *in vivo* model. We employed the mouse oxygen-induced retinopathy, or OIR, model, which provides an *in vivo* model of retinopathy of prematurity, or ROP, and DR. In this model, UBX1325 demonstrated a statistically significant improvement in the degree of retinal neovascularization (Figure 6).

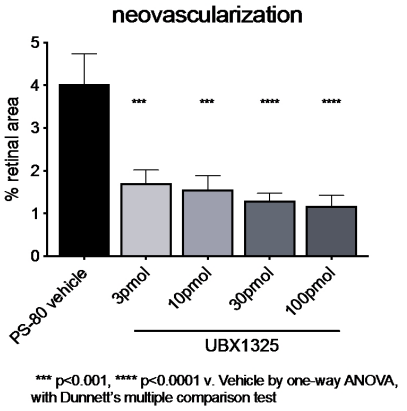


Figure 6: Intravitreal injection of UBX1325 reduced retinal neovascularization in the mouse OIR model

Based on these results in this key OIR model, we believe a single ocular injection of UBX1325 has the potential to functionally inhibit neovascularization and promote vascular repair. We believe the efficacy of UBX1325 in this OIR model is due to elimination of senescent cells and accompanying SASP that propagates senescence in retinal cells and promotes neovascularization of retinal vessels.

We then studied the *in vivo* efficacy of UBX1325 in a streptozotocin-induced diabetic mouse, or STZ, model to understand its effects in a diabetic retina, which shows phenotypes similar to the human diseased condition. In this STZ model, UBX1325 demonstrated a significant reduction in vascular leakage as measured by Evans Blue dye permeation (Figure 7A). UBX1325 also demonstrated an improvement in the electroretinogram, or ERG, as a measure of retinal/photoreceptor function (Figure 7B). At a dose of 200 pmol delivered per eye, UBX1325 led to significant increase in the amplitude of both the A- and B-waves ($p<0.01$ and $p<0.0001$, respectively) of the ERG when compared to the vehicle control group. Lastly, the expression of several disease-relevant cytokines were elevated in the diabetic retina, but attenuation of those factors was not observed after administration of UBX1325.

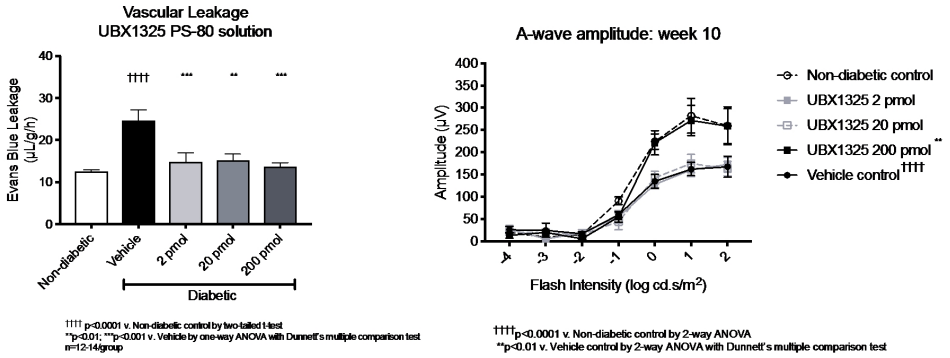


Figure 7: Streptozotocin-induced diabetic mice have increased retinal vascular leakage (7A) and decreased A-wave amplitude in ERG (7B). Administration of UBX1325 attenuated each of these disease-relevant endpoints.

Non-clinical toxicology studies of UBX1325, as well as its manufacturing and associated testing, have been completed to support the evaluation of the safety, tolerability, and pharmacokinetics of this molecule in a Phase 1 clinical study.

In vitro and in vivo Pharmacology Studies with UBX1967

We conducted an *in vitro* assessment of binding and efficacy of UBX1967 to determine both its potency for the Bcl-2 family protein targets and its potency at eliminating senescent cells. In order to assess the activity of UBX1967 on senescent cells, we used a cell-based assay with radiation-induced senescence. Senescent cells were exposed to increasing concentrations of UBX1967 for 72 hours. In this study, UBX1967 showed potent, dose-dependent senolytic activity against IMR90 and HRMEC as measured by reduction of senescent cell survival. UBX1967 also demonstrated selectivity for elimination of senescent HRMEC over non-senescent HRMEC which is observed as decreased potency in the non-senescent HRMEC (Figure 8).

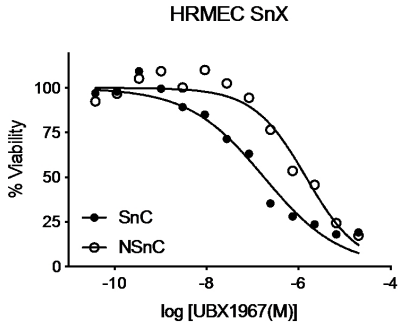


Figure 8: Concentration- dependent induction of apoptosis in HRMEC cells by UBX1967

We next studied the effects of an intravitreal injection of UBX1967 in mice in the OIR model, which provides an *in vivo* model of ROP and DR. In this model, UBX1967 demonstrated a statistically significant improvement in the degree of neovascularization of the retina at all dose levels (Figure 9).

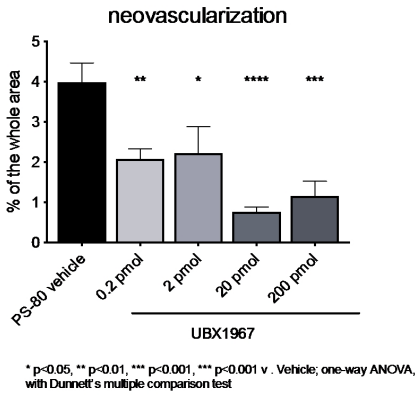


Figure 9: Intravitreal injection of UBX1967 reduced retinal neovascularization in the mouse OIR model

Based on the results in this key OIR model, we believe a single ocular injection of UBX1967 has the potential to functionally inhibit pathogenic angiogenesis and promote vascular repair (Figure 10). We believe the efficacy of UBX1967 in the OIR model is due to elimination of senescent cells and accompanying SASP that propagates senescence in retinal cells and promotes neovascularization of retinal vessels.

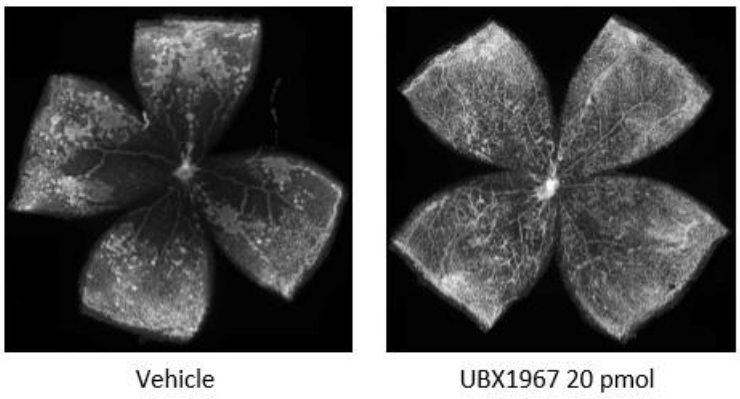


Figure 10: Representative images from mouse OIR illustrate the reduction in neovascularization and vaso-obliteration after treatment with UBX1967

We then studied *in vivo* efficacy of UBX1967 in the STZ mouse model to understand its effects in a diabetic retina. In this model, UBX1967 demonstrated a reduction in vascular leakage as measured by Evans Blue dye permeation. Intravitreal administration of UBX1967 significantly reversed leakage in the DMSO-based formulation ($p<0.01$) and demonstrated dose-dependent reversal in the PS-80-based formulation, although not statistically significant. UBX1967 also demonstrated an improvement in the ERG at all doses. At dose levels of between 2 – 200pmol delivered per eye, UBX1967 led to significant increase in the amplitude of both the A- and B-waves ($p<0.001$ and $p<0.0001$, respectively) of the ERG when compared to the vehicle control group. The ERG amplitudes of UBX1967-treated groups were not significantly different from the non-diabetic control animals.

Finally, UBX1967 demonstrated a dose dependent reduction in the expression of several disease-relevant cytokines, namely *IL1B* (2 – 200pmol) and *TNF* mRNA ($p<0.05$ v. vehicle control) in the diabetic retina.

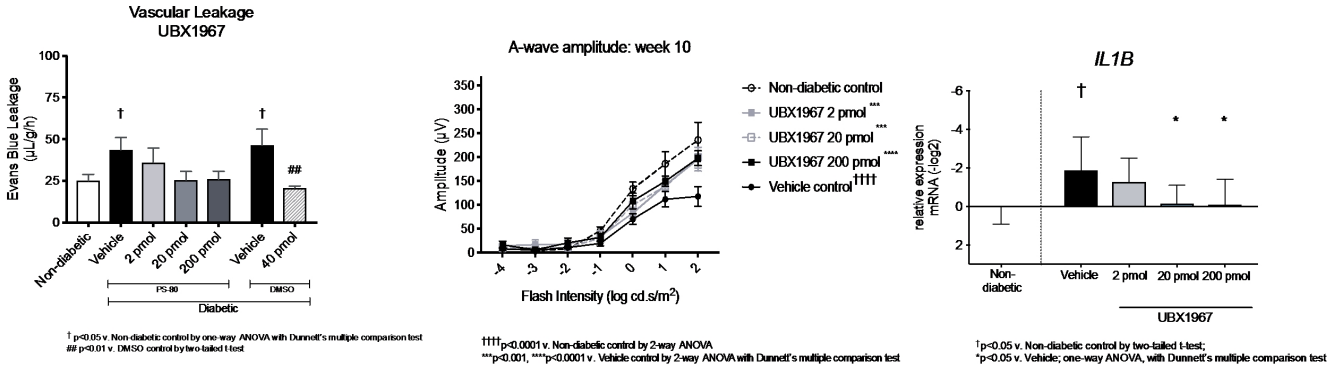


Figure 11: Streptozotocin-induced diabetic mice have increased retinal vascular leakage (top left), decreased A-wave amplitude in ERG (top right), and increased cytokine expression (lower panel). Administration of UBX1967 attenuated each of these disease-relevant endpoints.

We are in the final phases of IND-enabling non-clinical toxicology studies of UBX1967 to evaluate its safety and tolerability. Manufacturing and testing of UBX1967 to support the initiation of clinical studies of UBX1967 is nearing completion.

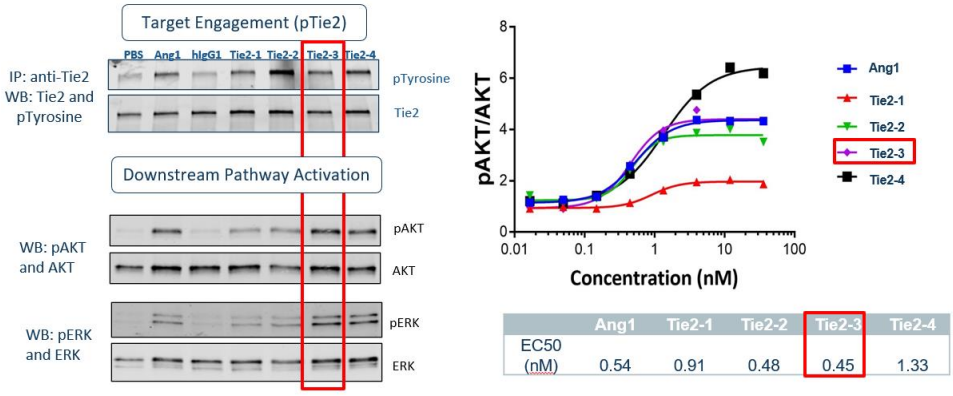
Ophthalmology Development Plan for UBX1325

In July 2020, we filed an Investigational New Drug application, or IND, to commence a Phase 1 study of UBX1325 in patients with DME or AMD. We initiated a Phase 1 clinical study of UBX1325 and dosed the first patient in October 2020. The Phase 1, first-in-human, open-label, single-ascending dose study is designed to evaluate the safety, tolerability, and pharmacokinetics of UBX1325 in patients with DME or AMD. The trial is designed to enroll approximately 21 patients, with initial safety and tolerability data expected in the first half of 2021. We also anticipate initiating a Phase 2a proof of concept study in the first half of 2021, with preliminary results expected in the first half of 2022.

As part of our continued commitment to our ophthalmology indications, we also continue to design alternative senolytic molecules with differing mechanisms of action. We are also focused on the physiochemical properties of our small molecules and are developing approaches to optimize solubility, permeability, and pharmacokinetic, or PK, parameters to create favorable ocular absorption, distribution, metabolism, and residency profiles.

Ophthalmology Program Targeting Tie2 Signaling

The angiopoietin-Tie2 signaling axis is believed to play a fundamental role in vascular biology. Dysregulation of the expression of Tie2-regulating ligands angiopoietin-2 (a context dependent Tie2 antagonist ligand) and angiopoietin-1 (a Tie2 agonist ligand) has been observed in the vitreous of patients with DME, AMD, and other ocular diseases. We believe that a highly specific and potent Tie2-activating antibody will restore Tie2 signaling in ocular tissues, potentially leading to decreased vascular leak, lower levels of pathogenic angiogenesis, and a restoration of healthy blood vessels in ischemic areas of the eye. UBX2050 is an investigational Tie2-specific agonist monoclonal antibody that was selected based on its optimal binding and functional properties observed in in vitro assays. In primary human endothelial cells (HUVECs), UBX2050 treatment activated Tie2 as measured by increased levels of cellular phospho-Tie2, and potently activated downstream signal transduction pathways as measured by increased levels of phospho-Akt and phospho-Erk1/2 by western blotting (Figure 12).



	Ang1	Tie2-1	Tie2-2	Tie2-3	Tie2-4
EC50 (nM)	0.54	0.91	0.48	0.45	1.33

Figure 12. Anti-Tie2 agonist antibody Tie2-3 (UBX2050) activated Tie2 signaling with a potency comparable to angiopoietin-1 in primary endothelial cells in vitro.

The in vivo activity of UBX2050 has been explored in a laser-induced choroidal neovascularization model in mice. In this model, UBX2050 was administered to mice via the intraperitoneal route at a dose of 10 mg/kg, one day prior to laser-induced rupture of Bruch's membrane. UBX2050 treatment, but not treatment with a non-specific isotype control antibody, significantly inhibited the area of choroidal neovascularization nine days post-injury as measured in retina/choroid flat mounts from treated animals (Figure 13). Based on this data, we believe UBX2050 has the potential to address pathogenic angiogenesis in the eyes of patients with ocular diseases such as AMD and DME.

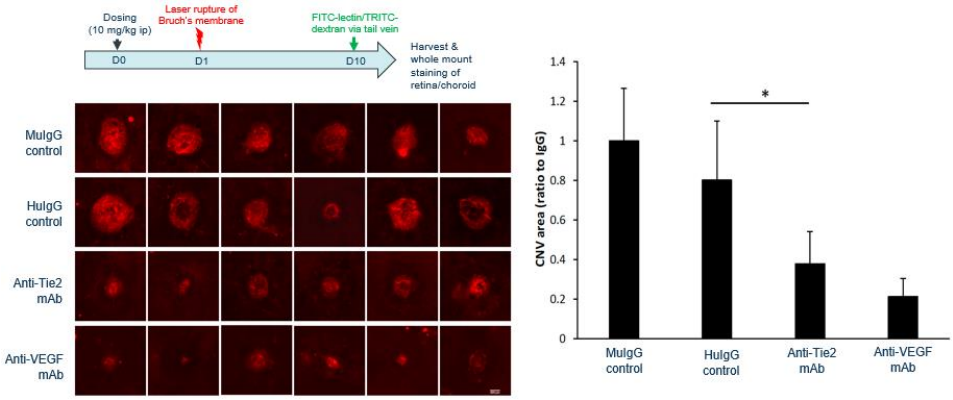


Figure 13. UBX2050 treatment significantly inhibited choroidal neovascularization in a laser-induced injury model in mice.

Additional preclinical studies exploring the activity and tolerability of UBX2050 are ongoing to support the initiation of IND-enabling activities in the second half of 2021.

Neurology Program Targeting Cognition

α-Klotho Hormone

We are also evaluating the administration of α-Klotho hormone for the potential treatment of diseases of aging. First discovered in 1997, the *klotho* gene was identified in mice as an "aging-suppressor" that accelerates aging when disrupted and extends lifespan when overexpressed. The α-Klotho hormone is a circulating hormone primarily produced in the kidneys and choroid plexus of the brain and was recently discovered to delay and suppress the deleterious effects of aging on multiple organs, including the brain. Circulating levels of α-Klotho hormone gradually decline with age and are implicated in chronic stress, cognitive impairment, and neurodegenerative disease.

A small percentage of the population possesses naturally elevated α-Klotho levels as a result of the α-Klotho-VS heterozygous genetic variation. α-Klotho-VS heterozygosity is associated with enhanced cognition, and less age-related cognitive decline. Elevated α-Klotho levels are also associated with greater dorsolateral prefrontal cortex volume and improved connectivity between cortical regions, which in turn correlates with better executive function in normal aging humans. As this brain region is especially susceptible to shrinkage with age and vulnerable in several psychiatric and neurological disorders, its protection may provide clinical benefit in both normal aging and disease.

In 2014, Dena Dubal, of the University of California, San Francisco, and one of our former scientific collaborators, first observed that genetically elevated α-Klotho levels significantly enhanced cognitive performance and neural resilience independent of age in normal and human amyloid precursor protein mouse models of neurodegenerative disease related to Alzheimer's Disease. α-Klotho is hypothesized to optimize synaptic neurotransmission of NMDA receptors in the brain, potentially combatting the cognitive and synaptic deficits, despite high levels of pathogenic Ab, tau, and phosphorylated tau proteins associated with Alzheimer's Disease.

We have observed therapeutic activity, pharmacokinetics, and pharmacodynamics of recombinant α-Klotho in multiple preclinical rodent and non-human primate models of neurodegenerative and neuropsychiatric disease. Activity of UBX2089, our α-Klotho drug candidate, continues to be explored in preclinical animal models of cognition and neurological function, with the intention of advancing a drug candidate to human studies.

Neurology Program Targeting Senescent Cells in Neurodegenerative Disease

We believe cellular senescence may play a fundamental role in neurodegeneration. Multiple lines of evidence suggest that senescent cells accumulate in the nervous system during normal aging and neurodegenerative disease. While the brain is composed of a diversity of post-mitotic (e.g. neurons) and proliferative (e.g. astrocytes, microglia, oligodendrocytes, endothelial cells, pericytes, neural progenitor cells, etc.) cells, glia appear to be uniquely prone to enter a senescent state. Interestingly, neurons do not readily express canonical markers of senescence, perhaps due to their terminally differentiated state. In the human cortex, a significant increase in p16 positive astrocytes has been observed in advanced age (78-90 years) relative to middle age (35-50 years) individuals. Cellular senescence has also been shown to be a hallmark of multiple neurodegenerative diseases. The appearance of senescent cells precedes the formation of neurofibrillary tangles and phosphorylated tau in the cortex of both human Alzheimer's Disease and the mouse P301S MAPT tauopathy/FTD model, suggesting that cellular senescence may be an early driver of disease pathophysiology. In Parkinson's Disease, elevated levels of p16 and several SASP factors have been detected in the human substantia nigra pars compacta, providing further evidence that astrocytes are prone to a senescent phenotype. Senescent astrocytes expressing elevated levels of p16, p21, and IL6 have also been detected in the human Amyotrophic Lateral Sclerosis brain and spinal cord.

Several preclinical third-party proof of concept studies in mouse models of aging and neurodegeneration have provided preliminary evidence that the removal of senescent cells via senolytic drugs or genetic methods can improve brain function. These early proof of concept studies provide encouraging evidence that senolysis can ameliorate the pathophysiology associated with neurodegeneration. We are focused on further development of our neurobiology platform, including studying human brain samples to elucidate the role of senescence in neurodegeneration pathophysiology and advanced preclinical screening and testing systems. We are currently pursuing our lead senolytic targets in multiple neurology indications.

Other *Programs Targeting Diseases of Aging*

We have secured a leading position in the discovery and development of senolytic medicines through our commitment to fundamental biological research and translational science. We have partnered with key academics and thought leaders to pursue areas of emerging aging science. We continue to recruit top-tier scientists with the desire and drive to understand, uncover, and invent. We invest a significant proportion of our resources and effort in emerging fields of aging science in order to transition fundamental scientific observations to the design and development of new therapeutics. We believe that we have built the internal research capabilities and scientific network to continue to be at the forefront of slowing, halting, or reversing diseases of aging.

In addition to our discovery and development of locally administered senolytic medicines, we are investigating the systemic administration of senolytic medicines for the treatment of senescent cell-driven disease within specific organs, tissues, and cell types that are not amenable to local treatment. Our first approach to systemic administration is to create a senolytic medicine that is designed to target a specific organ or even specific tissue within that organ. Such a senolytic medicine would selectively eliminate senescent cells within a tissue and reduce the SASP within that tissue. In considering therapeutic areas with unmet need and where there is strong evidence for the role of senescent cells driving disease, we are evaluating liver and kidney disease, as well as other indications.

Our long-term goal is to use the principles that we establish for the design of systemically administered, targeted senolytic medicines to produce a pipeline of clinical candidates to eliminate senescent cells throughout the body. This could draw on ideas from immunology, senolytic viruses, vaccines, CAR-T type approaches or antibody drug conjugates.

Manufacturing

Our success as a company will depend on our ability to deliver reliable, high-quality preclinical and clinical drug supply. As we mature as a company and approach commercial stage operations, securing reliable high-quality commercial drug supply will be critical. We contract with third parties for the manufacture of our drug candidates for clinical studies. Because we rely on contract manufacturers, we employ personnel with extensive technical, manufacturing, analytical, and quality experience. Our staff has strong project management discipline to oversee

contract manufacturing and testing activities, and to compile manufacturing and quality information for our regulatory submissions.

Manufacturing is subject to extensive regulation that imposes various procedural and documentation requirements and that governs record keeping, manufacturing processes and controls, personnel, quality control and quality assurance, and more. Our systems and our contractors are required to be in compliance with these regulations, and compliance is assessed regularly through monitoring of performance and a formal audit program.

Our current supply chains for our lead drug candidates involve several manufacturers that specialize in specific operations of the manufacturing process, specifically, raw materials manufacturing, drug substance manufacturing, drug product manufacturing, and drug product labeling, packaging, and storage. We currently operate under purchase order programs for our drug candidates with Material Service Agreements in place, and we intend to establish long-term supply agreements in the future. We believe our current manufacturers have the scale, the systems, and the experience to supply all planned clinical studies.

We do not currently require commercial manufacturing capabilities. Should our needs change, we will likely need to scale up our manufacturing processes to enable commercial launch. To ensure continuity in our supply chain, we plan to establish supply arrangements with alternative larger scale suppliers for certain portions of our supply chain, as appropriate.

Commercialization Plan

We do not currently have, nor do we expect to have in the near term, any FDA-approved drugs in our portfolio. Therefore, we have not yet built an infrastructure for sales, marketing, or commercial distribution.

Should any of our drug candidates move into pivotal clinical trials intended to support an application for market authorization, we intend to develop a plan to commercialize them in the United States and other key markets, through an internal infrastructure or external partnerships.

Competition

The biotechnology and pharmaceutical industries, including the field of research in aging, are typically rife with rapid technological developments, bold competition, and dependence on intellectual property. Like any biotechnology company, we face competition from multiple sources, including large or established pharmaceutical, biotechnology, and wellness companies, academic research institutions, government agencies, and private institutions. We believe our drug candidates will prevail amid the competitive landscape through their efficacy, safety, administration methods and convenience, cost, public and institutional demand, intellectual property portfolio, and treatment of the root cause of many diseases of aging.

We are aware of other companies seeking to develop treatments to prevent or treat diseases of aging through various biological pathways, including several large pharmaceutical companies that have exploratory programs as well as a number of earlier-stage companies. Most of these companies are either in early stages of discovery research in senescence or have not yet disclosed pipeline candidates or mechanisms of interest, and those companies that have disclosed pipeline candidates are targeting other pathways. Hence, we believe that we currently have the most advanced program addressing cellular senescence.

Our drug candidates are likely to compete against current therapies from a wide range of companies and technologies, including therapies for our lead indications:

- Ophthalmology diseases, including diabetic retinopathy: current standard of care treatments include anti-VEGF antibodies (bevacizumab, ranibizumab, aflibercept, brolucizumab); intravitreal steroid (dexamethasone); and pan-retinal photocoagulation by laser for both neovascular AMD, DR, and DME. There is no currently available treatment for geographic atrophy form of AMD. There are potentially disease-modifying therapeutics are being developed by several pharmaceutical and biotechnology companies, including Roche/Genentech and Regeneron.

- Cognitive diseases, including those resulting from neurodegenerative disorders such as Parkinson's Disease or Alzheimer's Disease, or from mood disorders such as schizophrenia, or depression. Drugs to slow cognitive decline in Alzheimer's Disease are limited to acetylcholinesterase inhibitors (e.g., donepezil) and memantine, the action of which is poorly defined. In both cases, the overall treatment effect is low so that the medical need in remains exceedingly high. For the cognitive impact of Parkinson's Disease and mood disorders, there are no approved therapies currently available.

Many of our competitors, either alone or with strategic partners, have substantially greater financial, technical, and human resources than we do. Accordingly, our competitors may be more successful in obtaining approval for treatments and achieving widespread market acceptance, rendering our treatments obsolete or non-competitive. Accelerated merger and acquisition activity in the biotechnology and biopharmaceutical industries may result in even more resources concentrated among a smaller number of our competitors. These companies also compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical study sites, patient registration for clinical studies, and acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Our commercial opportunity could be substantially limited in the event that our competitors develop and commercialize products that are more effective, safer, more tolerable, more convenient, or less expensive than our comparable products. In geographies that are critical to our commercial success, competitors may also obtain regulatory approvals before us, resulting in our competitors building a strong market position in advance of our products' entry. We believe the factors determining the success of our programs will be the efficacy, safety, and convenience of our drug candidates.

Intellectual Property

Our success depends in large part upon our ability to obtain and maintain proprietary protection for our products and technologies and to operate without infringing the proprietary rights of others. Our policy is to protect our proprietary position by, among other methods, filing U.S. and foreign patent applications that relate to our proprietary technologies, inventions and improvements that are important to the development and implementation of our business. We also rely on trademarks, know-how, continuing technological innovation and licensing opportunities to develop and maintain our proprietary position.

Patent Portfolio

Our patent portfolio consists of a combination of issued and allowed patents and pending patent applications that are owned or co-owned by us and/or licensed to us from third parties. The majority of these patents and applications cover our cellular senescence program, and others pertain to our programs that target aging mechanisms beyond cellular senescence, including the administration of a Tie2 receptor agonist or α-Klotho hormone. As of March 1, 2021, we own, co-own, or have an exclusive license in certain fields of use to more than 150 patents and pending applications in the United States and foreign jurisdictions. This portfolio includes 43 issued and allowed U.S. patents and applications and 32 granted and allowed foreign patents and applications, respectively.

In general, patents have a term of 20 years from the earliest claimed non-provisional priority date. The patent term may be extendible by up to five years in certain countries by means of patent term extension depending on the regulatory pathway and the remaining term upon marketing approval. Certain other patents and patent applications directed to our patent portfolio, if they were to issue, may have later expiration dates. Any pending U.S. provisional application is not eligible to become an issued patent until, among other things, we file a non-provisional patent application within 12 months of filing the related provisional patent application. If we do not timely file any non-provisional patent application, we may lose our priority date with respect to our provisional patent application and any patent protection on the inventions disclosed in our provisional patent application.

Ophthalmology Program

We have a license with Ascentage to two patent families of issued and pending composition of matter patents directed to specific Bcl-xL inhibitors including UBX0601, the active parent molecule of our lead drug

candidate, UBX1325. This license grants us exclusive development and commercialization rights and non-exclusive manufacturing rights to UBX1325 for all non-oncology indications outside of Greater China (China, Hong Kong, Macau and Taiwan). Inside Greater China, we will be obligated to develop, manufacture and commercialize UBX1325 through a joint venture with Ascentage. Patents in these two patent families have been granted in the United States, Korea, New Zealand, South Africa, Australia, Canada, India, Singapore, Japan and Europe, and others are pending in China, India and Singapore. Patents that issue from these two patent families are expected to expire in 2032 and 2034, excluding any patent term adjustments or extensions.

Our license agreement with Ascentage also grants us the right to continue our preclinical development efforts with UBX1967 until the time we wish to submit an IND for UBX1967, at which point we would be required to either enter into a separate license agreement with Ascentage covering UBX1967, the terms of which would mirror the UBX1325 license agreement, or amend the existing license agreement to switch UBX1967 and UBX1325 such that UBX1967 becomes the licensed compound and UBX1325 reverts to the back-up compound.

We co-own a patent family encompassing the use of Bcl-2 and Bcl-xL inhibitors generally to treat various age-related eye diseases by targeting senescent cells (which also covers aspects of our neurology programs) with the Buck Institute and the Mayo Clinic. We have exclusive licenses from each of the Buck Institute and the Mayo Clinic to this patent family in the field of senescence. To date, two U.S. patents have issued in this patent family which are directed to treating age related eye diseases, including age-related macular degeneration. Other patent applications are pending in the United States, Australia, Canada, China, Europe, and Japan. Patents that issue from this family are expected to expire in 2035, excluding any patent term adjustments and patent term extensions.

We solely own a patent family covering the use of UBX1325 and UBX1967 to inhibit vaso-obliteration, inhibit pathogenic angiogenesis and improve retinal and choroidal leakage in the eye. We have one issued U.S. patent that encompasses the use of UBX1967 to inhibit vaso-obliteration in the eye and a pending U.S. patent application encompassing the use of either UBX1325 or UBX1967 to inhibit pathogenic angiogenesis, retinal neovascularization, or vascular leak in the eye as a result of DR. Outside the United States, we have pending applications in Australia, Canada, China, Europe, Russia and Japan. Future patents issued from this family would be expected to expire in 2038 excluding any patent term adjustments and patent term extensions.

We also solely own a patent family that specifically claims the composition of matter of UBX1325 and closely related compounds, as well as general methods of use of UBX1325. Future patents issued from this family are expected to expire in 2039, excluding any patent term adjustments and patent term extensions.

We solely own a patent family that specifically covers the sequence, epitope, alternative antibody formats and use of UBX2050 not only for ophthalmic diseases, but also other indications. Future patents issuing from this family are expected to expire in 2040, excluding any patent term adjustments and patent term extensions.

Neurology Program Targeting Cognition

We have an exclusive license with The Regents of the University of California for a patent family directed to methods of treatment and the use of α-Klotho hormone for the development of human therapeutics to treat cognitive decline. As of March 1, 2021, our patent portfolio includes three issued U.S. patents, an issued patent in Australia and Japan, one pending patent application in each of the United States, Canada, Europe, Hong Kong, and India and two pending patent applications in China. Patents that issue from this family are expected to expire in 2036, excluding any patent term adjustments and patent term extensions.

Neurology Program Targeting Senescent Cells in Neurodegenerative Disease

We co-own a patent family encompassing the use of Bcl-2/xL inhibitors generally to treat neurodegenerative diseases by targeting senescent cells (which also covers aspects of our ophthalmology program) with the Buck Institute and the Mayo Clinic. We have exclusive licenses from each of the Buck Institute and the Mayo Clinic to this patent family in the field of senescence. Currently, we co-own a pending U.S. patent application for the use of Bcl-xL inhibition to eliminate senescent cells to treat neurodegenerative disorders. Patents that issue from this family are expected to expire in 2035, excluding any patent term adjustments and patent term extensions.

Other Intellectual Property

Our continuing research and development, technical know-how, and contractual arrangements supplement our intellectual property protection to maintain our competitive position. Our policy is to require inventors who are identified on any Company-owned patent applications to assign rights to us. We also have confidentiality agreements with our employees, consultants, and other advisors to protect our proprietary information. Our policy is to require third parties that receive material UNITY confidential information to enter into confidentiality agreements with us.

We also protect our brand through procurement of trademark rights. As of March 1, 2021, the mark UNITY BIOTECHNOLOGY® and the UNITY BIOTECHNOLOGY® design logo are registered in both the United States, the European Union, or EU, and in Japan, as well as other foreign jurisdictions. The mark UNITY® is also registered in the United States and in the EU. In order to supplement protection of our brand, we have also registered several internet domain names.

Licenses and Collaborations

Description of Ascentage Agreements

In February 2016, we entered into several related agreements with Ascentage Pharma Group Corp. Limited, or Ascentage, which is headquartered in Suzhou, China and listed on the Hong Kong Stock Exchange. These agreements include: (i) a compound library and option agreement, which includes a template form of license agreement, (ii) a license agreement covering an initial compound, APG1252, and (iii) a research services agreement. In January 2019, we entered into another license agreement granting us development and commercialization rights to UBX1967 and the right to continue preclinical development efforts with UBX1325, which is a phosphate pro-drug that releases the active parent molecule known as UBX0601, or the Original Bcl Agreement. This Original Bcl Agreement was amended in the fourth quarter of 2019 to remove certain field and territory limitations and to amend the schedule of licensed patents related to UBX1967, and then amended again in the first quarter of 2020 to further amend and restate the schedule of licensed patents. This Original Bcl Agreement was amended a third time in June 2020 to switch the status of UBX1967 from Licensed Compound to back-up compound, and conversely the status of UBX1325 from back-up to Licensed Compound.

Library Agreement and License Template

The compound library and option agreement, or library agreement, gives us access to Ascentage's existing collection of Bcl-2/xL inhibitor compounds, as well as any additional Bcl-2/xL inhibitor compounds developed during the term of the library agreement, in order to screen such compounds for senolytic activity. The library agreement permits us to nominate up to 15 such compounds at any given time for further evaluation and subsequently to select up to five of such selected compounds for preclinical development and an additional five as back-up compounds. Prior to commencing IND-enabling toxicology studies on an Ascentage compound of interest, we must formally designate the compound as a development candidate under the library agreement and enter into a separate license agreement with Ascentage covering that compound on the terms set forth in the template form of license agreement. The library agreement includes exclusivity provisions that (i) prohibit us from developing Ascentage Bcl-2/xL compounds for oncology indications, (ii) prohibit Ascentage from researching or developing certain Bcl-2/xL compounds for non-oncology indications under any circumstances, and (iii) prohibit Ascentage from researching or developing certain other Bcl-2/xL compounds for a specified set of non-oncology indications under certain circumstances. The term of the library agreement is determined by a formula that is linked to the term of the research services agreement, and is expected to expire in February 2022. The library agreement may be terminated by either party due to the other party's uncured material breach of the library agreement.

Under the terms of the template form of license agreement, Ascentage will grant us the following rights with respect to a selected Ascentage compound for all non-oncology indications: (i) exclusive worldwide development rights, and (ii) exclusive commercialization rights outside of Greater China (China, Hong Kong, Macau and Taiwan). Inside Greater China, we will be obligated to commercialize the licensed Ascentage compound through a joint venture with Ascentage. Ascentage will also have the right to manufacture at least 50% of our supply

requirements of the licensed compound, provided they achieve and maintain certain manufacturing quality standards. We will be obligated to make certain milestone payments in the form of shares of our common stock, subject to the equity cap described below, and other milestone payments in in the form of cash, not to exceed $38.0 million per licensed product, based in each case, upon the achievement of certain clinical and commercial milestones. We will also be required to make low-single digit royalty payments on net sales of the licensed product under the agreement. Our royalty payment obligations will expire on a country-by-country basis and licensed product-by-licensed product basis upon the later to occur of (i) the expiration of the last valid claim of a licensed patent covering such licensed product in such country, (ii) the expiration of regulatory exclusivity for such licensed product in such country, and (iii) the tenth anniversary of the first commercial sale of such licensed product in any country. We have the right to credit certain royalty payments that we pay to third parties with respect to certain licensed products against our royalty obligation to Ascentage. Any license agreement may be terminated by either party due to the other party's uncured material breach of the agreement.

Under the library agreement, we issued 133,334 shares of our common stock as an upfront license fee. Of such shares, 80% were issued to Ascentage and 20% were issued to the University of Michigan in satisfaction of Ascentage's obligation to pay a related sublicense fee to the University of Michigan. In addition to the shares issued pursuant to the APG1252 license agreement described below, we will also be obligated to issue an additional 133,334 shares of our common stock as an upfront license fee to Ascentage and the University of Michigan for each of the next two license agreements. The aggregate number of shares of our common stock we could be required to issue to Ascentage and the University of Michigan pursuant to the library agreement, the APG1252 license agreement, and any additional license agreements we enter into pursuant to the library agreement is capped at (i) 933,337 shares of common stock in the event there is only one licensed product, and (ii) 1,333,338 shares of common stock in the event there are two or more licensed products, in each case to be issued based on our achievement of certain preclinical and clinical development and sales milestone events.

APG1252 License Agreement

In conjunction with the library agreement, we entered into our first license agreement with Ascentage, which granted us the right to develop and commercialize an Ascentage compound known as APG1252 on the template license terms described above, including up to $38.0 million of potential cash milestone payments and low-single digit royalties. Under the APG1252 license agreement, Ascentage retained the right to manufacture APG1252 compounds for use in our licensed products. In connection with the APG1252 license agreement, we issued 533,335 shares of our common stock as an upfront license fee to Ascentage and the University of Michigan, in the proportion described above. The APG1252 license agreement could be terminated by either party due to the other party's uncured material breach of the APG1252 license agreement, and we could terminate for convenience on a licensed product-by-licensed product basis. On July 30, 2020, we notified Ascentage of our decision to terminate the APG1252 license agreement due to us prioritizing the progression of other compounds from the library agreement, such as UBX1325.

Research Agreement

In conjunction with the library agreement we also entered into a research services agreement with Ascentage under which we provided $0.5 million per year in funding to Ascentage for the further development of Bcl-2/xL inhibitor compounds, which we retain the right to access under the library agreement. The research agreement had a term of up to four years from the effective date of February 2, 2016, provided that the research agreement may have been terminated by us for convenience after the first year, by either party due to the other party's uncured material breach, and by Ascentage if we failed to make the $0.5 million payment in any given year. On February 2, 2020, this agreement expired by its terms and was not renewed.

UBX1967 License Agreement

In January 2019, we entered into our second license agreement, or Bcl license agreement, with Ascentage granting rights to UBX1967 (which Ascentage calls APG1197) on the template license terms described above, including up to $38.0 million of potential cash milestone payments and low-single digit royalties. Under the terms of this license agreement, Ascentage has granted us exclusive development and commercialization rights and non-exclusive manufacturing rights to UBX1967 for all non-oncology indications outside of Greater China. Inside

Greater China, we will be obligated to develop, manufacture and commercialize UBX1967 through a joint venture with Ascentage. The Bcl license agreement also grants us the right to continue our preclinical development efforts with another Ascentage-controlled Bcl-2/xL inhibitor compound. In the event we wish to pursue clinical development of the additional compound as well as UBX1967, we will be required to enter into a separate license agreement with Ascentage on the template license terms described above. In connection with the Bcl license agreement, we issued 106,667 shares of common stock to Ascentage and 26,667 shares of common stock to the University of Michigan as an upfront license fee in the first quarter of 2019. The Bcl license agreement may be terminated by either party due to an uncured material breach of the agreement but the other party, and we may terminate for convenience on a licensed product-by-licensed product basis. In November 2019, we entered into an amendment to the Bcl license agreement that removed certain field and territory limitations from a provision granting us exclusivity and amended the schedule of licensed patents to include certain additional patents relating to UBX1967. In January 2020, we entered into a second amendment to the Bcl license agreement which further amended and restated the schedule of licensed patents. In June 2020, we entered into a third amendment to the Bcl license agreement. Under the terms of the original Bcl license agreement, Ascentage granted us exclusive development and commercialization rights and non-exclusive manufacturing rights to UBX1967 as well as the right to continue our preclinical development efforts with another Ascentage-controlled Bcl inhibitor compound, known as UBX1325, that served as a back-up compound to UBX1967. Under the terms of the third amendment to the Bcl license agreement, the status of UBX1967 and UBX1325 were switched such that UBX1325 became the licensed compound and UBX1967 became the back-up compound under the Bcl license agreement. As a result of the first patient dosed in the UBX1325 study in the fourth quarter of 2020, we triggered, under the Bcl license agreement, a milestone payment of $1.0 million, which we elected to settle in shares of our common stock to Ascentage Pharma.

Additional License Agreements

We are party to three additional license agreements that support our senescence-related patent portfolio. These agreements are with The John Hopkins University, or JHU, an entity affiliated with the Mayo Clinic, or Mayo, and the Buck Institute for Research on Aging, or Buck, and provide us with a worldwide, exclusive, sublicensable license under those counter-parties' rights to a patent family that is co-owned by JHU, Buck, Mayo and us to develop and commercialize licensed products, including for the treatment of senescence-related diseases in therapeutic areas including osteoarthritis, ophthalmology, and neurological diseases.

Under our June 2013 license with Mayo, we may be obligated to make development and sales milestone payments to Mayo of up to $10.8 million in the aggregate, to pay Mayo a percentage of certain sublicensing revenue that is between the high-single digits and the low-teens, and to pay Mayo running royalty payments ranging from less than 1% to low-single digit percentages on net sales of licensed products. Our obligation to pay running royalties to Mayo under the agreement is subject to a non-material minimum annual royalty and could potentially extend until January 1, 2037. We also issued 677,966 shares of our common stock to Mayo under this agreement. Our agreement with Mayo continues until the later of (i) the expiration of the last valid claim within the licensed patents and (ii) 13 years after first commercial sale of the first licensed product. We may terminate the agreement for convenience, and either party may terminate the agreement for the other party's uncured material breach.

Under our January 2017 license with Buck, which includes similar rights to a second patent family that is co-owned only by Buck and us, we may be obligated to make development and sales milestone payments to Buck of up to $5.4 million in the aggregate, to pay Buck a mid-single digit percentage of certain sublicensing revenue, and to pay Buck running royalty payments ranging from less than 1% to low-single digit percentages on net sales of licensed products. Our obligation to pay running royalties to Buck under the agreement is subject to a non-material minimum annual royalty and could potentially extend until January 1, 2037. We also issued 132,203 shares of our common stock to Buck under this agreement. The term of our license agreement with Buck continues until the expiration of all our payment obligations to Buck thereunder. We may terminate the agreement for convenience, and either party may terminate the agreement for the other party's uncured material breach.

Under our November 2016 license with JHU, which relates to patents that are relevant only to osteoarthritis indications, we may be obligated to make development and sales milestone payments to JHU in the form of equity (22,033 shares of our common stock) and cash (of up to $2.6 million in the aggregate), to pay JHU a low-single digit percentage of certain sublicensing revenue, and to pay JHU a running royalty payment of less than 1% on net sales,

in all cases, with respect to licensed products for the treatment of osteoarthritis, which we refer to as Royalty Products. Our obligation to pay running royalties to JHU under the agreement is subject to a non-material minimum annual royalty, and may continue on a country-by-country basis until such time as neither the manufacture, sale, nor use of such Royalty Product would infringe a valid claim of a licensed patent in the applicable country. Our agreement with JHU continues on a country-by-country basis until the expiration of the last to expire licensed patent in such country (or until twenty years after the effective date if no licensed patent issues in such country). We may terminate the agreement for convenience (as a whole, with respect to a licensed product, or with respect to a particular licensed patent). Either party may terminate the agreement for the other party's uncured material breach or bankruptcy or insolvency-related events.

Government Regulation

Government authorities in the United States (including federal, state and local authorities) and in other countries, extensively regulate, among other things, the manufacturing, research and clinical development, marketing, labeling and packaging, storage, distribution, post-approval monitoring and reporting, advertising and promotion, pricing, and export and import of pharmaceutical products, such as those we are developing. 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.

U.S. Government Regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations, and biologics under the FDCA and the Public Health Service Act, or PHSA, and its implementing regulations. FDA approval is required before any new unapproved drug or dosage form, including a new use of a previously approved drug, can be marketed in the United States. Drugs and biologics are also subject to other federal, state and local statutes and regulations. If we fail to comply with applicable FDA or other requirements at any time during the drug development process, clinical testing, the approval process or after approval, we may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution.

The process required by the FDA before drug candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests and preclinical animal studies, all performed in accordance with GLP regulations;
- submission to the FDA of an IND, which must become effective before human clinical studies may begin;
- approval by an independent institutional review board, or IRB, or ethics committee representing each clinical site before each clinical study may be initiated;
- performance of adequate and well-controlled human clinical studies to establish the safety and efficacy, or in the case of a biologic, the safety, purity and potency, of the drug candidate for each proposed indication;
- preparation of and submission to the FDA of a new drug application, or NDA, or biologics license application, or BLA, after completion of all pivotal clinical studies;
- review of the product application by an FDA advisory committee, where appropriate and if applicable;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities where the drug candidate is produced to assess compliance with current Good Manufacturing Practices, or cGMP; and
- FDA review and approval of an NDA or BLA prior to any commercial marketing or sale of the drug or biologic in the United States.

An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for human studies. The IND also includes results of animal and *in vitro* studies assessing the toxicology, pharmacokinetics, pharmacology and pharmacodynamic characteristics of the product; chemistry, manufacturing and controls information; and any available human data or literature to support the use of the investigational new drug. An IND must become effective before human clinical studies may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical studies. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before clinical studies can begin. Accordingly, submission of an IND may or may not result in the FDA allowing clinical studies to commence.

Clinical Studies

Clinical studies involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with Good Clinical Practice regulations, or GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical study. Clinical studies are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the efficacy criteria to be evaluated. A protocol for each clinical study and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical study site's IRB before the studies may be initiated, and the IRB must monitor the study until completed. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries.

The clinical investigation of a drug or biologic is generally divided into three or four phases. Although the phases are usually conducted sequentially, they may overlap or be combined.

- *Phase 1.*The drug or biologic is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to evaluate the safety, dosage tolerance, metabolism and pharmacologic actions of the investigational new drug in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness.
- *Phase 2.*The drug or biologic is administered to a limited patient population to evaluate dosage tolerance and optimal dosage, identify possible adverse side effects and safety risks and preliminarily evaluate efficacy.
- *Phase 3.*The drug or biologic is administered to an expanded patient population, generally at geographically dispersed clinical study sites to generate enough data to statistically evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of the investigational product and to provide an adequate basis for product approval.
- *Phase 4.*In some cases, the FDA may condition approval of an NDA or BLA for a drug candidate on the sponsor's agreement to conduct additional clinical studies after approval. In other cases, a sponsor may voluntarily conduct additional clinical studies after approval to gain more information about the drug. Such post-approval studies are typically referred to as Phase 4 clinical studies.

A pivotal study is a clinical study that adequately meets regulatory agency requirements for the evaluation of a drug candidate's efficacy and safety such that it can be used to justify the approval of the product. Generally, pivotal studies are Phase 3 studies, but the FDA may accept results from Phase 2 studies if the study design provides a well-controlled and reliable assessment of clinical benefit, particularly in situations where there is an unmet medical need and the results are sufficiently robust.

The FDA, the IRB or the clinical study sponsor may suspend or terminate a clinical study at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Additionally, some clinical studies are overseen by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study.

A sponsor may also suspend or terminate a clinical study based on evolving business objectives and/or competitive climate.

Submission of an NDA or BLA to the FDA

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational new drug product information is submitted to the FDA in the form of an NDA or BLA requesting approval to market the product for one or more indications. Under federal law, the submission of most NDAs and BLAs is subject to a substantial application user fee. Applications for orphan drug products are exempted from the NDA and BLA application user fees.

An NDA or BLA must include all relevant data available from pertinent preclinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational product to the satisfaction of the FDA.

Once an NDA or BLA has been submitted, the FDA's goal is to review the application within ten months after it accepts the application for filing, or, if the application receives priority review, six months after the FDA accepts the application for filing. The review process is often significantly extended by FDA requests for additional information or clarification.

Before approving an NDA or BLA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA or BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

The FDA is required to refer an application for a novel drug or biologic to an advisory committee or explain why such referral was not made. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions and typically follows such recommendations.

The FDA's Decision on an NDA or BLA

After the FDA evaluates the NDA or BLA and conducts inspections of manufacturing facilities, it may issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug or biologic with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application is not ready for approval. A Complete Response Letter may require additional clinical data and/or an additional pivotal Phase 3 clinical study(ies), and/or other significant, expensive and time-consuming requirements related to clinical studies, preclinical studies or manufacturing. Even if such additional information is submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval. The FDA could also approve the NDA or BLA with a Risk Evaluation and Mitigation Strategy, or REMS, to mitigate risks, which could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling, development of adequate controls and specifications or a commitment to conduct one or more post-market studies or clinical studies. Such post-market testing may include Phase 4 clinical studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization. Also, new government

requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

Expedited Review and Accelerated Approval Programs

The FDA has various programs, including fast track designation, breakthrough therapy designation, accelerated approval, and priority review, that are intended to expedite the development and approval of new drugs and biologics that address unmet medical needs in the treatment of serious or life-threatening diseases and conditions. To be eligible for a fast track designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA may review sections of the NDA 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 NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

The FDA may give a priority review designation to drugs or biologics that are designed to treat a serious condition and, if approved, would provide a significant improvement in safety or effectiveness compared to available therapies. A priority review means that the goal for the FDA to review an application is six months, rather than the standard review of ten months. These six- and 10-month review periods are measured from the "filing" date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review and decision from the date of submission. Products that are eligible for fast-track designation may also be eligible for priority review.

In addition, 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 and may be approved on the basis of adequate and well-controlled clinical studies establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on 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 a sponsor of a drug receiving accelerated approval to perform post-marketing studies to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug or biologic may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required post-marketing studies, or such post-marketing studies fail to confirm the predicted clinical benefit.

Moreover, under the provisions of the Food and Drug Administration Safety and Innovation Act, or FDASIA, passed in July 2012, a sponsor can request designation of a product candidate as a "breakthrough therapy." A breakthrough therapy is defined as a drug or biologic that is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. This 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.

Fast track designation, priority review, and breakthrough therapy designation do not change the standards for approval but may expedite the development or approval process. Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Post-Approval Requirements

Drugs and biologics marketed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There also are continuing, annual user fee requirements.

Manufacturers are subject to periodic unannounced inspections by the FDA and state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA or BLA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

The FDA may 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 a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-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 the product;
- complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending NDAs or BLAs or supplements to approved NDAs or BLAs, or suspension or revocation of product licenses or approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs 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.

Orphan Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 individuals in the United States and when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States for that drug or biologic. Orphan drug designation

must be requested before submitting a BLA or NDA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA.

If a product that has orphan drug designation subsequently receives the first FDA approval for a particular active ingredient for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full NDA or BLA, to market the same drug or biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the BLA or NDA application user fee.

A designated orphan drug many not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or, as noted above, if the second applicant demonstrates that its product is clinically superior to the approved product with orphan exclusivity or the manufacturer of the approved product is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Biosimilars and Exclusivity

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the Affordable Care Act, signed into law in 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 a handful of biosimilars have 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 study 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. During this 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 that applicant’s own preclinical data and data from adequate and well-controlled clinical studies to demonstrate the safety, purity and potency of its 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 continues 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 impact of the BPCIA is subject to significant uncertainty.

Hatch-Waxman Amendments and Exclusivity

Section 505 of the FDCA describes three types of marketing applications that may be submitted to the FDA to request marketing authorization for a new drug. A Section 505(b)(1) NDA is an application that contains full reports of investigations of safety and efficacy. A 505(b)(2) NDA is an application that contains full reports of investigations of safety and efficacy but where at least some of the information required for approval comes from investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. This regulatory pathway enables the applicant to rely, in part, on the FDA's prior findings of safety and efficacy for an existing product, or published literature, in support of its application. Section 505(j) establishes an abbreviated approval process for a generic version of approved drug products through the submission of an Abbreviated New Drug Application, or ANDA. An ANDA provides for marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics and intended use, among other things, to a previously approved product. ANDAs are termed "abbreviated" because they are generally not required to include preclinical (animal) and clinical (human) data to establish safety and efficacy. Instead, generic applicants must scientifically demonstrate that their product is bioequivalent to, or performs in the same manner as, the innovator drug through in vitro, *in vivo* or other testing. The generic version must deliver the same amount of active ingredients into a subject's bloodstream in the same amount of time as the innovator drug and can often be substituted by pharmacists under prescriptions written for the reference listed drug. In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent with claims that cover the applicant's drug or a method of using the drug. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential competitors in support of approval of an ANDA or 505(b)(2) NDA.

Upon submission of an ANDA or a 505(b)(2) NDA, an applicant must certify to the FDA that (1) no patent information on the drug product that is the subject of the application has been submitted to the FDA; (2) such patent has expired; (3) the date on which such patent expires; or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. If the applicant does not challenge the listed patents, or indicates that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all of the listed patents claiming the referenced product have expired.

If the ANDA or 505(b)(2) NDA applicant has provided a Paragraph IV certification to the FDA, the applicant must send notice of the Paragraph IV certification to the NDA and patent holders once the application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the paragraph IV certification. If the paragraph IV certification is challenged by an NDA holder or the patent owner(s) asserts a patent challenge to the paragraph IV certification, the FDA may not approve that application until the earlier of 30 months from the receipt of the notice of the paragraph IV certification, the expiration of the patent, when the infringement case concerning each such patent was favorably decided in the applicant's favor or settled, or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where an ANDA or 505(b)(2) NDA applicant files a paragraph IV certification, the NDA holder or patent owner(s) regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve.

The FDA also cannot approve an ANDA or 505(b)(2) application until all applicable non-patent exclusivities listed in the Orange Book for the branded reference drug have expired. For example, a pharmaceutical manufacturer may obtain five years of non-patent exclusivity upon NDA approval of a new chemical entity, or NCE, which is a drug containing an active moiety that has not been approved by FDA in any other NDA. An "active moiety" is defined as the molecule responsible for the drug substance's physiological or pharmacologic action. During that five-year exclusivity period, the FDA cannot accept for filing (and therefore cannot approve) any ANDA seeking approval of a generic version of that drug or any 505(b)(2) NDA that relies on the FDA's approval of the drug, provided that that the FDA may accept an ANDA four years into the NCE exclusivity period if the ANDA applicant also files a Paragraph IV certification.

A drug, including one approved under Section 505(b)(2), may obtain a three-year period of exclusivity for a particular condition of approval, or change to a marketed product, such as a new formulation for a previously approved product, if one or more new clinical studies (other than bioavailability or bioequivalence studies) was essential to the approval of the application and was conducted/sponsored by the applicant. Should this occur, the FDA would be precluded from approving any ANDA or 505(b)(2) application for the protected modification until after that three-year exclusivity period has run. However, unlike NCE exclusivity, the FDA can accept an application and begin the review process during the exclusivity period.

Other Healthcare Laws and Compliance Requirements

Pharmaceutical companies are subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, and physician sunshine laws and regulations. If their operations are found to be in violation of any of such laws or any other governmental regulations that apply, they may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of operations, exclusion from participation in federal and state healthcare programs and individual imprisonment.

Coverage and Reimbursement

Sales of any product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state and foreign government healthcare programs, commercial insurance and managed healthcare organizations and the level of reimbursement for such product by third-party payors. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. These third-party payors are increasingly reducing reimbursements for medical products, drugs and services. For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product. Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product and also have a material adverse effect on sales.

Healthcare Reform

In March 2010, former President Obama signed the Affordable Care Act, which substantially changed the way healthcare is financed by both governmental and private insurers in the United States, and significantly affected the pharmaceutical industry. The Affordable Care Act contains a number of provisions, including those governing enrollment in federal healthcare programs, reimbursement adjustments and fraud and abuse changes. Additionally, the Affordable Care Act increases the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1%; requires collection of rebates for drugs paid by Medicaid managed care organizations; requires manufacturers to participate in a coverage gap discount program, under which they must agree to offer 70 percent point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during

their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and imposes a non-deductible annual fee on pharmaceutical manufacturers or importers who sell "branded prescription drugs" to specified federal government programs.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, and we expect there will be additional challenges and other efforts to repeal or replace the Affordable Care Act in the future. Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted, including aggregate reductions of Medicare payments to providers of 2% per fiscal year and reduced payments to several types of Medicare providers. Moreover, there has recently been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

Privacy and Security Laws

Numerous state, federal and foreign laws, including consumer protection laws and regulations, govern the collection, dissemination, use, access to, confidentiality and security of personal information, including health-related information. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws, including the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, and federal and state consumer protection laws and regulations (e.g., Section 5 of the FTC Act), that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our partners. In addition, certain state and non-U.S. laws, such as the California Consumer Privacy Act, or the CCPA, the California Privacy Rights Act, or the CPRA, and the General Data Protection Regulation, or the GDPR, govern the privacy and security of personal data, including health-related data in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure to comply with these laws, where applicable, can result in the imposition of significant civil and/or criminal penalties and private litigation. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Employees and Human Capital Resources

As of December 31, 2020, we had 61 employees, all of whom were full-time. Approximately 36% of our employees hold advanced degrees. The majority of our employees work in our corporate headquarters. None of our employees are represented by a labor union or a collective bargaining agreement and we consider our relationship with our employees to be good.

Our human capital resources objectives are, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. As such, we expend considerable time, attention, and financial resources on these activities. Our corporate culture, which is underpinned by our company values, is the overarching framework we use to make decisions related to people practices, including total compensation, short and long-term incentives, health and wellness, and employee engagement.

Facilities

Our corporate headquarters are located in South San Francisco, California, where we currently lease approximately 62,000 square feet of office and laboratory space pursuant to a lease dated February 28, 2019. Substantially all our employees work at our corporate headquarters.

Legal Proceedings

We are not currently involved in any litigation or legal proceedings that, in management's opinion, are likely to have any material adverse effect on our company. While we know of no imminent legal action in which we are likely to be involved, we may in the future become engaged in litigation or other legal proceedings. Regardless of the outcome, litigation can have an adverse impact due to defense fees, settlement costs, demands on management attention, and other concerns.

Financial Information About Segments

We view our operations and manage our business as one reportable segment. See Note 1 in the Notes to Financial Statements included in this Annual Report on Form 10-K. Additional information required by this item is incorporated herein by reference to Part II, Item 6, "Selected Financial Data."

About UNITY

We were incorporated in the State of Delaware on March 30, 2009. Our registered trademarks include UNITY BIOTECHNOLOGY®. Other service marks, trademarks and trade names referred to in this document are the property of their respective owners.

Available Information

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended and we therefore file periodic reports, proxy statements and other information with the U.S. Securities and Exchange Commission, or SEC, relating to our business, financial statements and other matters. The SEC maintains an Internet site, *www.sec.gov*, that contains reports, proxy statements and other information regarding issuers such as UNITY.

For more information about UNITY, including free access to our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, visit our website, *www.unitybiotechnology.com*. The information found on or accessible through our website is not incorporated into, and does not form a part of, this Annual Report on Form 10-K.

Item 1A. Risk Factors

Risk Factor Summary

Below is a summary of the principal factors that make an investment in our common stock speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below under the heading "Risk Factors" and should be carefully considered, together with other information in this Annual Report on Form 10-K and our other filings with the Securities and Exchange Commission, or SEC, before making investment decisions regarding our common stock.

- We are a clinical-stage biopharmaceutical company with a limited operating history and no products approved for commercial sale. We have incurred significant losses since our inception, and we anticipate that we will continue to incur losses for the foreseeable future, which, together with our limited operating history, make it difficult to assess our future viability.

- We will require substantial additional financing to achieve our goals, and a failure to obtain this capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development, other operations or commercialization efforts.

- Our core therapeutic approach to slow, halt, or reverse diseases of aging is based on our understanding of cellular senescence. Utilizing senolytic molecules to treat diseases of aging is a novel therapeutic approach, which exposes us to unforeseen risks and makes it difficult to predict the time and cost of drug development and potential for regulatory approval.

- Our business is dependent on the successful development, regulatory approval, and commercialization of our drug candidates, all of which are in early stages of development and none of which have shown definitive efficacy in human subject.

- The COVID-19 pandemic could adversely impact our business, including our clinical trials, and financial condition.

- Even if our current drug candidates or any future drug candidates obtain regulatory approval, they may fail to achieve the broad degree of physician and patient adoption and use necessary for commercial success.

- We rely on third-party suppliers to manufacture preclinical and clinical supplies of our drug candidates and we intend to continue to rely on third parties to produce such preclinical and clinical supplies as well as commercial supplies of any approved product. The loss of these suppliers, or their failure to comply with applicable regulatory requirements or to provide us with sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business.

- We face significant competition in an environment of rapid technological and scientific change, and our drug candidates, if approved, will face significant competition and our failure to effectively compete may prevent us from achieving significant market penetration. Most of our competitors have significantly greater resources than we do, and we may not be able to successfully compete.

- Our senolytic medicine platform and any future products that we commercialize could be alleged to infringe patent rights and other proprietary rights of third parties, which may require costly litigation and, if we are not successful, could cause us to pay substantial damages and/or limit our ability to commercialize our products. Even if we obtain regulatory approval for a drug candidate, our products will remain subject to regulatory scrutiny.

Risk Factors

This Annual Report on Form 10-K contains forward-looking information based on our current expectations. Because our business is subject to many risks and our actual results may differ materially from any forward-looking statements made by or on behalf of us, this section includes a discussion of important factors that could affect our business, operating results, financial condition and the trading price of our common stock. Many of the following risks and uncertainties are, and will be, exacerbated by the COVID-19 pandemic and any worsening of the global business and economic environment as a result. This discussion should be read in conjunction with the other information in this Annual Report on Form 10-K, including our financial statements and the notes accompanying those financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The occurrence of any of the events or developments described below could have a material adverse effect on our business, results of operations, financial condition, prospects and stock price. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business.

Risks Related to Our Limited Operating History, Financial Condition, and Capital Requirements

We are a clinical-stage biopharmaceutical company with a limited operating history and no products approved for commercial sale. We have incurred significant losses since our inception, and we anticipate that we will continue to incur losses for the foreseeable future, which, together with our limited operating history, make it difficult to assess our future viability.

We are a clinical-stage biopharmaceutical company with a limited operating history. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We have not yet sought approval for commercial sale of any products and therefore have no products approved for commercial sale and have not generated any revenue from contracts with customers and have incurred losses in each year since our inception in March 2009. We have only a limited operating history upon which you can evaluate our business and prospects. In addition, we have limited experience and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical industry. We completed a Phase 1 and Phase 2 clinical study of UBX0101, a senolytic small molecule inhibitor of the MDM2/p53 protein-protein interaction, in patients with osteoarthritis, or OA. In August 2020, we announced the 12-week results from our Phase 2 study of UBX0101 in patients with moderate-to-severe painful OA of the knee. There was no statistically significant difference between any arm of UBX0101 and placebo at the 12-week primary endpoint for change from baseline in WOMAC-A, an established measurement of pain in OA. Given these results, we are not progressing UBX0101 into pivotal studies and have narrowed our near-term focus to our ongoing ophthalmologic and neurologic disease programs. In the third quarter of 2020, we initiated a Phase 1 study of UBX1325 in patients with diabetic macular edema, or DME, or age-related macular degeneration, or AMD, and expect to obtain initial safety and tolerability results from this study in the first half of 2021.

We have had significant operating losses since our inception. Our net loss for the years ended December 31, 2020 and 2019 was approximately $93.8 million and $82.2 million, respectively. As of December 31, 2020, we had an accumulated deficit of $339.3 million. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase as we continue to develop our drug candidates, conduct clinical studies and pursue research and development activities. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital.

We will require substantial additional financing to achieve our goals, and a failure to obtain this capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development, other operations or commercialization efforts.

Since our inception, we have invested a significant portion of our efforts and financial resources in research and development activities. Preclinical studies and clinical studies for our drug candidates and additional research and development activities to discover and develop new drug candidates will require substantial funds to complete. As of

December 31, 2020, we had capital resources consisting of cash, cash equivalents, and marketable securities of $115.6 million. We believe that we will continue to expend substantial resources for the foreseeable future in connection with the preclinical and clinical development of our drug candidates, including UBX1325, and the discovery and/or development of any other drug candidates we may choose to pursue. These expenditures will include costs associated with conducting preclinical studies and clinical studies, obtaining regulatory approvals, and manufacturing and supply, as well as marketing and selling any products approved for sale. In addition, other unanticipated costs may arise. Because the outcome of any preclinical study or clinical study is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our current drug candidates or any future drug candidates.

We believe that our existing cash, cash equivalents and marketable securities will be sufficient to enable us to fund our projected operations through at least the next 12 months. However, our operating plans may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations. Such financing may result in dilution to stockholders, the imposition of burdensome debt covenants and repayment obligations, or other restrictions that may affect our business. Adequate funding may not be available to us on acceptable terms, or at all, particularly in light of the current COVID-19 pandemic and associated economic uncertainty and potential for local and/or global economic recession. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing our drug candidates, and conducting preclinical studies and clinical studies, including our ongoing Phase 1 safety and tolerability study of UBX1325, which we recently initiated, and our additional planned clinical studies in our ophthalmology program;
- the timing of, and the costs involved in, obtaining regulatory approvals for our current drug candidates or any future drug candidates;
- potential delays in or an increase in costs associated with our ongoing or planned preclinical studies or clinical trials as a result of the COVID-19 pandemic;
- the number and characteristics of any additional drug candidates we develop or acquire;
- the timing and amount of any milestone payments we are required to make pursuant to our license agreements;
- the cost of manufacturing our current drug candidates or any future drug candidates and any products we successfully commercialize;
- the expenses needed to attract, hire and retain skilled personnel;
- the cost of building a sales force and related functions in anticipation of product commercialization;
- the cost of commercialization activities if our current drug candidates or any future drug candidates are approved for sale, including marketing, sales and distribution costs;
- our ability to maintain existing, and establish new, strategic collaborations, licensing or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;
- any product liability or other lawsuits related to our products;
- the costs associated with being a public company;

- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our intellectual property portfolio; and
- the timing, receipt and amount of sales of any future approved products, if any.

Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to:

- delay, limit, reduce or terminate preclinical studies, clinical studies or other development activities for our current drug candidates or any future drug candidate;
- delay, limit, reduce or terminate our research and development activities; or
- delay, limit, reduce or terminate our efforts to establish manufacturing and sales and marketing capabilities or other activities that may be necessary to commercialize our current drug candidates or any future drug candidate, or reduce our flexibility in developing or maintaining our sales and marketing strategy.

We also could choose or be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our technologies or drug candidates that we would otherwise pursue on our own. We do not expect to realize revenue from sales of products or royalties from licensed products in the foreseeable future, if at all, and unless and until our drug candidates are clinically tested, approved for commercialization and successfully marketed. To date, we have primarily financed our operations through the sale of equity securities. We will be required to seek additional funding in the future and currently intend to do so through collaborations, public or private equity offerings or debt financings, credit or loan facilities or a combination of one or more of these funding sources. Our ability to raise additional funds will depend on financial, economic and other factors, many of which are beyond our control. For example, financial markets have been negatively impacted by the COVID-19 pandemic and associated economic uncertainty, and such impact may be exacerbated as the COVID-19 pandemic evolves or by other unforeseen events or public health emergencies. Additional funds may not be available to us on acceptable terms or at all. If we raise additional funds by issuing equity securities, our stockholders will suffer dilution and the terms of any financing may adversely affect the rights of our stockholders. In addition, as a condition to providing additional funds to us, future investors may demand, and may be granted, rights superior to those of existing stockholders. Debt financing, if available, is likely to involve restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of our equity securities received any distribution of our corporate assets.

Due to the significant resources required for the development of our drug candidates, we must prioritize development of certain drug candidates and/or certain disease indications. We may expend our limited resources on candidates or indications that do not yield a successful product and fail to capitalize on drug candidates or indications that may be more profitable or for which there is a greater likelihood of success.

We plan to continue to develop a pipeline of drug candidates to slow, halt, or reverse diseases of aging. Our clinical development strategy is initially focused on the development of senolytic medicines designed to be administered locally into diseased tissue and we are currently advancing programs in ophthalmologic disorders. We are also in the early stages of developing medicines that target cellular senescence and other biologies of aging to treat additional diseases of aging, such as neurodegenerative diseases.

We seek to maintain a process of prioritization and resource allocation among our programs to maintain a balance between aggressively advancing lead programs in identified indications and exploring additional indications and/or mechanisms related to diseases of aging. However, due to the significant resources required for the development of our drug candidates, we must focus on specific diseases and disease pathways and decide which drug candidates
to pursue and the amount of resources to allocate to each. In response to the COVID-19 pandemic, we implemented a reduced onsite staffing model in mid-March 2020, and as the COVID-19 pandemic evolves we may be required to take additional actions that impact the prioritization of programs as required by applicable laws or regulations, or which we determine to be in the best interest of our employees.

Our near-term objective is to demonstrate in our clinical studies that local treatment with senolytic molecules can alter the course of diseases of aging. To accomplish this goal, we completed an Investigational New Drug application, or IND-enabling non-clinical toxicology studies with UBX1325, a senolytic, small molecule inhibitor of the anti-apoptotic Bcl-2 family member, Bcl-xL in the third quarter of 2020. We initiated a Phase 1 clinical study of UBX1325 in October 2020 and, assuming clinical sites are able to recruit and retain investigators and study staff, and continue to enroll patients, and patients are able to complete all study visits, we expect to receive initial safety and tolerability data results from the Phase 1 clinical study in the first half of 2021. However, the impact of the COVID-19 pandemic on the timing of study initiations, enrollment, visit adherence, and completions is difficult to assess due the rapidly evolving nature of the situation and it is possible that the study enrollment, visit adherence and completion may be delayed.

Our decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular drug candidates or therapeutic areas may not lead to the development of any viable commercial product and may divert resources away from better opportunities. Similarly, our potential decisions to delay, terminate or collaborate with third parties in respect of certain programs may subsequently also prove to be suboptimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the viability or market potential of any of our programs or drug candidates or misread trends in the biopharmaceutical industry, particularly those segments focused on aging, our business, financial condition and results of operations could be materially adversely affected. 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 drug candidates or other diseases and disease pathways that may later prove to have greater commercial potential than those we choose to pursue, or relinquish valuable rights to such drug candidates through collaboration, licensing or other royalty arrangements in cases where it may have been more advantageous for us to invest additional resources to retain development and commercialization rights.

Interim, "top-line" and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose top-line or preliminary data from our clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line or preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the top-line or preliminary data we previously published. As a result, top-line and preliminary data should be viewed with caution until the final data are available.

From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data from clinical trials that we may conduct are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product, our ability to make certain claims about our products, and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure.

If the interim, top-line or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations.

Our quarterly and annual operating results may fluctuate significantly, making it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control and may be difficult to predict, including:

- the timing, cost and level of investment in research, development and, if approved, commercialization activities relating to our drug candidates, which may change from time to time;
- the timing and status of enrollment for our clinical studies;
- the cost of manufacturing our drug candidates, as well as building out our supply chain, which may vary depending on the quantity of production and the terms of our agreements with manufacturers;
- expenditures we may incur to acquire, develop or commercialize additional drug candidates and technologies;
- timing and amount of any milestone, royalty or other payments due under any collaboration or license agreement;
- future accounting pronouncements or changes in our accounting policies;
- the timing and success or failure of preclinical studies and clinical studies for our drug candidates or competing drug candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- the timing of receipt of approvals for our drug candidates from regulatory authorities in the United States and internationally;
- coverage and reimbursement policies with respect to our drug candidates, if approved, and potential future drugs that compete with our products;
- the level of demand for our products, if approved, which may vary significantly over time; and
- potential disruption caused by the COVID-19 pandemic or other unforeseen events and public health emergencies.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

Risks Related to Our Business and Product Development

Our core therapeutic approach to slow, halt, or reverse diseases of aging is based on our understanding of cellular senescence. Utilizing senolytic molecules to treat diseases of aging is a novel therapeutic approach, which exposes us to unforeseen risks and makes it difficult to predict the time and cost of drug development and potential for regulatory approval.

We are developing a pipeline of drug candidates to treat diseases of aging. Our foundational science and lead drug candidates are based on senescence biology. We believe that we can develop drug candidates capable of eliminating or modulating accumulated senescent cells, when administered locally. In our development efforts we intend to explore senolytic medicines that use multiple modalities. However, our approach to treating diseases of aging is novel and the scientific research that forms the basis of our efforts to develop senolytic medicines is ongoing. We have only recently begun testing our senolytic molecules in humans and the majority of our current data supporting our hypothesis regarding senescence biology is limited to pre-clinical animal models and *in vitro* cell lines, the results of which may not translate into humans. We currently have no conclusive evidence in humans, that the accumulation or modulation of senescent cells is the underlying cause of tissue damage and dysfunction associated with many diseases of aging. For example, in August 2020, we announced the 12-week results from our Phase 2 study of UBX0101 in patients with moderate-to-severe painful OA of the knee. UBX0101 is an inhibitor of the p53-MDM2 interaction. There was no statistically significant difference between any arm of UBX0101 and placebo at the 12-week endpoint for change from baseline in WOMAC-A, an established measurement of pain in OA. Given these results, we are not progressing UBX0101 into pivotal studies and decided not to pursue further development of this product candidate. We will narrow our near-term focus to our ongoing ophthalmologic and neurologic disease programs. Our current program, UBX1325, is a Bcl-xL inhibitor, and is intended to target senescent cells in the eye. While cellular senescence is a naturally occurring biological process, the administration of senolytic medicines to eliminate or cause the elimination or modulation of accumulated senescent cells in humans has not been widely tested and may potentially harm healthy tissue or result in unforeseen safety events, or fail to achieve the intended therapeutic purpose entirely. We may also ultimately discover that our senolytic molecules do not possess certain properties required for therapeutic effectiveness, or that even if found to be effective in one type of tissue, that such molecules will be effective in other tissues. In addition, given the novel nature of this therapeutic approach, designing preclinical and clinical studies to demonstrate the effect of senolytic medicines is complex and exposes us to unforeseen risks. In addition, the scientific evidence to support the feasibility of developing systemic senolytic medicines is based primarily on preclinical data and not human clinical trials. We may spend substantial funds attempting to develop these drug candidates and never succeed in doing so.

No regulatory authority has granted approval for a senolytic medicine. As such, we believe the U.S. Food and Drug Administration, or the FDA, has limited experience with senescence, which may increase the complexity, uncertainty and length of the clinical development and regulatory approval process for our drug candidates. We may never receive approval to market and commercialize any drug candidate. Even if we obtain regulatory approval, the
approval may be for targets, disease indications or patient populations that are not as broad as we intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We may be required to perform additional or unanticipated clinical studies to obtain approval or be subject to post-marketing testing requirements to maintain marketing authorization. If our other senolytic molecules prove to be ineffective, unsafe or commercially unviable, our entire senolytic platform and pipeline would have little, if any, value, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our business is dependent on the successful development, regulatory approval, and commercialization of our drug candidates, all of which are in early stages of development and none of which have shown definitive efficacy in human subject.

We have no products approved for sale and all of our drug candidates are in early stages of development. Additionally, following the 12-week results from our Phase 2 study of UBX0101 in patients with moderate-to-severe painful OA of the knee showed no statistically significant difference between UBX0101 and placebo for the primary endpoint of change, we decided not to pursue further development of this product candidate. To advance our ophthalmology program, we completed IND-enabling studies, and in July 2020, we filed an IND for our lead drug candidate, UBX1325. We initiated a Phase 1 clinical study of UBX1325 in October 2020. However, the impact of the COVID-19 pandemic on the timing of study enrollment, visit adherence, and completions is hard to assess

due the rapidly evolving nature of the situation and it is possible that the study enrollment, visit adherence and completion may be delayed.

UBX0101 and UBX1325 are the only drug candidates that we have administered to humans, and as such, we face significant translational risk with our drug candidates. We may also be required by the FDA or similar foreign regulatory agencies to conduct additional preclinical studies beyond those planned to support the commencement of additional clinical trials. For example, in preclinical studies, we observed that UBX1967 showed sustained exposure in ocular tissues of interest after intravitreal injection. After engaging the FDA regarding the design of IND-enabling studies for UBX1967, we determined that the duration of such preclinical studies would be longer than originally anticipated due to the extended exposure profile, delaying the commencement of our initial Phase 1 study for age-related eye diseases. In the second quarter of 2020, we decided to commence our initial Phase 1 clinical study in ophthalmology disease with UBX1325 in part because of its shorter exposure profile.

The success of our business, including our ability to finance our company and generate any revenue in the future, will primarily depend on the successful development, regulatory approval and commercialization of drug candidates from our senolytic medicine pipeline. However, given our early stage of development, it may be many years, if we succeed at all, before we have demonstrated the safety and efficacy of a drug candidate sufficient to warrant approval for commercialization.

In the future, we may also become dependent on other drug candidates that we may develop or acquire. The clinical and commercial success of our drug candidates and future drug candidates will depend on a number of factors, including the following:

- our ability to raise any additional required capital on acceptable terms, or at all;
- our ability to complete IND-enabling studies and successfully submit an IND or comparable applications in foreign jurisdictions;
- timely completion of our preclinical studies and clinical studies, which may be significantly slower or cost more than we currently anticipate and will depend substantially upon the performance of third-party contractors, some of whom could be adversely impacted by unforeseen events such as pandemics and public health emergencies, such as the COVID-19 pandemic;
- whether we are required by the FDA or similar foreign regulatory agencies to conduct additional clinical studies or other studies beyond those planned to support the approval and commercialization of our drug candidates or any future drug candidates;
- acceptance of our proposed indications and primary endpoint assessments relating to the proposed indications of our drug candidates by the FDA and similar foreign regulatory authorities;
- our ability to demonstrate to the satisfaction of the FDA and similar foreign regulatory authorities the safety, efficacy and acceptable risk-to-benefit profile of our current drug candidates or any future drug candidates;
- the prevalence, duration and severity of potential side effects or other safety issues experienced with our drug candidates or future approved products, if any;
- the timely receipt of necessary marketing approvals from the FDA and similar foreign regulatory authorities;
- achieving and maintaining, and, where applicable, ensuring that our third-party contractors achieve and maintain compliance with our contractual obligations and with all regulatory requirements applicable to our current drug candidates or any future drug candidates or approved products, if any;
- the willingness of physicians, professional societies, operators of clinics, hospitals, and patients to recommend, utilize or adopt any of our future drug candidates to treat diseases of aging;

- the ability of third parties with whom we contract to manufacture adequate clinical study and commercial supplies of our current drug candidates or any future drug candidates, to remain in good standing with regulatory agencies and develop, validate and maintain commercially viable manufacturing processes that are compliant with current good manufacturing practices, or cGMP;

- our ability to successfully develop a commercial strategy and thereafter commercialize our drug candidates or any future drug candidates in the United States, and internationally, if approved for marketing, reimbursement, sale and distribution in such countries and territories, whether alone or in collaboration with others;

- the convenience of our treatment or dosing regimen;

- acceptance by physicians, payors and patients of the benefits, safety and efficacy of our drug candidates or any future drug candidates, if approved, including relative to alternative and competing treatments;

- patient demand for our drug candidates, if approved;

- our ability to establish and enforce intellectual property rights in and to our drug candidates or any future drug candidates; and

- our ability to avoid third-party patent interference, intellectual property challenges or intellectual property infringement claims.

These factors, many of which are beyond our control, could cause us to experience significant delays or be unable to obtain regulatory approvals or commercialize our drug candidates. In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in developing, obtaining regulatory approvals for or commercializing our product candidates. Even if regulatory approvals are obtained, we may never achieve success in commercializing any of our drug candidates. Accordingly, we cannot provide assurances that we will be able to generate sufficient revenue through the sale of our drug candidates or any future drug candidates to continue our business or achieve profitability.

The COVID-19 pandemic could adversely impact our business, including our clinical trials, and financial condition.

In December 2019, a novel strain of coronavirus, COVID-19, was reported to have surfaced in Wuhan, China. Since then, the COVID-19 pandemic has spread to multiple countries, including the United States, in which we have planned or active clinical trial sites. The pandemic and government measures taken in response have also had a significant impact, both direct and indirect, on businesses and commerce, as worker shortages have occurred, supply
chains have been disrupted, facilities and production have been suspended, and demand for certain goods and services, such as medical services and supplies, has spiked, while demand for other goods and services, such as travel, has fallen. In response to the spread of COVID-19, as of mid-March 2020, we transitioned to a reduced onsite staffing model and implemented a remote work plan for all of our employees other than those providing essential
services, such as our laboratory staff. For those onsite employees, we have implemented heightened safety measures designed to comply with applicable federal, state and local guidelines. We may be required to take additional actions that could impact our operations if required by applicable laws or regulations or if we determine to be in the best interests of our employees.

For the Phase 1 safety and tolerability clinical study for UBX1325, we adapted the clinical study protocol and standard operating procedures to enable a number of adaptations such as: remote data collection for clinical sites when possible; the option for remote data source verification procedures to limit on-site monitoring; transportation options for patients to utilize for study visit adherence; selection and use of central reading centers and centralized laboratories that do not require source data verification; flexible visit windows to increase study visit adherence; and geographic distribution of sites to mitigate variation in local restrictions. For the Phase 2a proof of concept clinical study for UBX1325, we will be making similar adaptations to accommodate patients and sites for the COVID-19 pandemic.

These actions enable the collection of all major endpoints if patients adhere with the study visit schedule. Assessments that require an on-site visit may be missed for some or all patients including laboratory evaluations, clinical examinations, or imaging.

Although one of the manufacturers in our supply chain for UBX0101 experienced a two-week shutdown in April 2020 due to a COVID-19 related incident and there have been some delays in shipments due to a reduction in overall flights, neither of these factors impacted our supply of UBX0101 prior to our decision to shut down further clinical advancement of that program. There have been no other disruptions in our supply chain of drug manufacturers necessary to conduct our ongoing clinical trials, including our recently initiated Phase 1 study in ophthalmology disease.

Several of the contract research organizations, or CROs, that provide preclinical services to us are based in China and India and experienced temporary shutdowns in February and March due to government mandates. In each case we were able to reassign the balance of activities to other CROs and the shutdowns did not impact our preclinical timelines. CROs based in the United States that provide preclinical services are experiencing heavy demand, which may impact their ability to start new studies and could lead to delays in the commencement of our preclinical studies. Several of our U.S.-based academic research partners have also experienced shutdowns which has slowed progress on several early stage projects, none of which impacted our preclinical timelines.

As the COVID-19 pandemic continues to spread around the globe, we will likely experience disruptions that could severely impact our business and clinical trials, including:

- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others or interruption of clinical trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial data;
- risk that participants enrolled in our clinical trials will contract the COVID-19 coronavirus while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events;
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- delays in receiving authorizations from local regulatory authorities to initiate our planned clinical trials;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials;
- interruption in global shipping that may affect the transport of clinical trial materials, such as investigational drug product used in our clinical trials;
- changes in local regulations as part of a response to the COVID-19 pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue such clinical trials altogether;

- interruptions or delays in preclinical studies due to restricted or limited operations at our research and development laboratory facilities;

- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees; and

- refusal of the FDA to accept data from clinical trials in affected geographies outside the United States.

The global pandemic of the COVID-19 coronavirus continues to rapidly evolve. The extent to which the COVID-19 pandemic may impact our business, including our clinical trials, and financial condition will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the pandemic, travel restrictions and social distancing in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease.

We may be unable to obtain regulatory approval for our drug candidates under applicable regulatory requirements. The denial or delay of any such approval would delay commercialization of our drug candidates and adversely impact our potential to generate revenue, our business and our results of operations.

To gain approval to market our drug candidates, we must provide the FDA and foreign regulatory authorities with clinical data that adequately demonstrate the safety and efficacy of the drug candidate for the intended indication applied for in the applicable regulatory filing. For our senolytic medicines, we must also demonstrate that eliminating or causing the elimination of senescent cells and modulating relevant associated SASP factors will lead to the improvement of well-defined and measurable endpoints.

We have not previously submitted a new drug application, or NDA, or biologics license application, or BLA, to the FDA, or similar approval filings to comparable foreign regulatory authorities. An NDA, BLA or other relevant regulatory filing must include extensive preclinical and clinical data and supporting information to establish that the drug candidate is safe and effective, or that a biological drug candidate is safe, pure and potent for each desired
indication. The NDA, BLA or other relevant regulatory submission must also include significant information regarding the chemistry, manufacturing and controls for the product.

The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of drug and biologic products are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, and such regulations differ from country to country. We are not permitted to market our drug candidates in the United States or in any foreign countries until they receive the requisite approval from the applicable regulatory authorities of such jurisdictions.

The FDA or any foreign regulatory bodies can delay, limit or deny approval of our drug candidates for many reasons, including:

- our inability to demonstrate to the satisfaction of the FDA or the applicable foreign regulatory body that any of our drug candidates is safe and effective for the requested indication;

- the FDA's or the applicable foreign regulatory agency's disagreement with our trial protocol or the interpretation of data from preclinical studies or clinical studies;

- our inability to demonstrate that the clinical and other benefits of any of our drug candidates outweigh any safety or other perceived risks;

- the FDA's or the applicable foreign regulatory agency's requirement for additional preclinical studies or clinical studies;

- the FDA's or the applicable foreign regulatory agency's failure to approve the formulation, labeling or specifications of UBX1325, UBX1967, or any of our future drug candidates;

- the FDA's or the applicable foreign regulatory agency's failure to approve the manufacturing processes or facilities of third-party manufacturers upon which we rely; or

- the potential for approval policies or regulations of the FDA or the applicable foreign regulatory agencies to significantly change in a manner that renders our clinical data insufficient for approval.

Of the large number of biopharmaceutical and pharmaceutical products in development, only a small percentage successfully complete the FDA or other regulatory approval processes and are commercialized.

Even if we eventually complete clinical testing and receive approval from the FDA or applicable foreign agencies for any of our drug candidates, the FDA or the applicable foreign regulatory agency may grant approval contingent on the performance of costly additional clinical studies which may be required after approval. The FDA or the applicable foreign regulatory agency also may approve our current drug candidates for limited indications or narrower patient populations than we originally requested, and the FDA, or applicable foreign regulatory agency, may not approve our drug candidates with the labeling that we believe is necessary or desirable for the successful commercialization of such drug candidates.

Any delay in obtaining, or inability to obtain, applicable regulatory approval would delay or prevent commercialization of our drug candidates and would materially adversely impact our business and prospects.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and or approve new products can be affected by a variety of factors, including government budget and funding levels and internal allocation, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new drugs and biologics to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days
beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the COVID-19 pandemic, on March 10, 2020 the FDA announced its intention to postpone most foreign inspections of manufacturing facilities, and on March 18, 2020, the FDA temporarily postponed routine surveillance inspections of domestic manufacturing facilities. Subsequently, on July 10, 2020 the FDA announced its intention to resume certain on-site inspections of domestic manufacturing facilities subject to a risk-based prioritization system. The FDA intends to use this risk-based assessment system to identify the categories of regulatory activity that can occur within a given geographic area, ranging from mission critical inspections to resumption of all regulatory activities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Clinical development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure or delay can occur at any time during the clinical study process. Success in preclinical studies and early clinical studies does not ensure that later clinical studies will be successful. A number of companies in the biotechnology, and

pharmaceutical industries have suffered significant setbacks in clinical studies, even after positive results in earlier preclinical studies or clinical studies. These setbacks have been caused by, among other things, preclinical findings made while clinical studies were underway and safety or efficacy observations made in clinical studies, including previously unreported adverse events. The results of our preclinical animal studies or studies in *ex vivo* human tissues may not be predictive of the results of outcomes in human clinical studies. For example, our senolytic molecules may demonstrate different chemical and pharmacological properties in patients than they do in laboratory studies or may interact with human biological systems in unforeseen or harmful ways.

Additionally, with respect to our initial clinical trials for our senolytic drug candidates, we may be unable to accurately predict whether or in what manner we will be able to measure the impact of a drug candidate on relevant SASP factors and disease biomarkers.

Drug candidates in later stages of clinical studies may fail to show the desired pharmacological properties or safety and efficacy traits despite having progressed through preclinical studies and initial clinical studies. Notwithstanding any promising results in earlier studies, we cannot be certain that we will not face similar setbacks. Even if we are able to initiate and complete clinical studies, the results may not be sufficient to obtain regulatory approval for our drug candidates.

Although we initiated our Phase 1 safety and tolerability clinical study for UBX1325 in October 2020, we may experience delays in obtaining FDA authorization or feedback to initiate further studies of UBX1325, or in completing our ongoing studies of UBX1325. We cannot be certain that studies or trials for our drug candidates will begin on time, not require redesign, enroll an adequate number of subjects on time or be completed on schedule, if at all. The COVID-19 pandemic could cause or exacerbate these factors. For example, for our ongoing Phase 1 study for UBX1325, clinical sites may be unable to recruit and retain investigators and study staff, screen and enroll patients, patients may be unable to adhere to the study visit schedule, and the completion of the study could be delayed. Clinical studies can be prolonged, delayed or terminated for a variety of reasons, including:

- the FDA or comparable foreign regulatory authorities disagreeing with or requiring changes to the design or implementation of our clinical studies;
- delays in obtaining regulatory approval to commence or continue a trial;
- reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtaining institutional review board, or IRB, approval at each trial site;
- recruiting an adequate number of suitable patients to participate in a trial;
- having subjects complete a trial or return for post-treatment follow-up;
- encountering difficulties in gathering the range of biological data from patients needed to fully assess the impact of our drug candidates, such as the challenges we encountered in collecting synovial fluid from OA patients in the single ascending dose portion of our Phase 1 clinical study;
- clinical sites deviating from trial protocol or dropping out of a trial;
- addressing subject safety concerns that arise during the course of a trial;
- adding a sufficient number of clinical study sites; or
- obtaining sufficient product supply of drug candidate for use in preclinical studies or clinical studies from third-party suppliers some of whom could be adversely impacted by unforeseen events such as pandemics and public health emergencies, such as the COVID-19 pandemic.

We may experience numerous adverse or unforeseen events during, or as a result of, preclinical studies and clinical studies that could delay or prevent our ability to receive marketing approval or commercialize our drug candidates, including:

- clinical studies of our drug candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to modify clinical study design, conduct additional clinical studies or abandon drug development programs, including all of our senolytic programs;
- the number of patients required for clinical studies of our drug candidates may be larger than we anticipate, enrollment in these clinical studies may be slower than we anticipate, or participants may drop out of these clinical studies at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements, fail to maintain adequate quality controls, or be unable to provide us with sufficient product supply to conduct and complete preclinical studies or clinical studies of our drug candidates in a timely manner, or at all;
- we or our investigators might have to suspend or terminate clinical studies of our drug candidates for various reasons, including noncompliance with regulatory requirements, a finding that our drug candidates have undesirable side effects or other unexpected characteristics, a finding that the participants are being exposed to unacceptable health risks, or due to unforeseen events such as pandemics and public health emergencies, such as the COVID-19 pandemic;
- the cost of clinical studies of our drug candidates may be greater than we anticipate;
- the quality of our drug candidates or other materials necessary to conduct preclinical studies or clinical studies of our drug candidates may be inadequate;
- regulators may revise the requirements for approving our drug candidates, or such requirements may not be as we anticipate; and
- future collaborators may conduct clinical studies in ways they view as advantageous to them but that are suboptimal for us.

If we are required to conduct additional clinical studies or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical studies of our drug candidates or other testing, if the results of these trials or tests are not positive or are only moderately positive, or if there are safety concerns, we may:

- incur unplanned costs;
- be delayed in obtaining marketing approval for our drug candidates or fail to obtain marketing approval at all;
- obtain marketing approval in some countries and not in others;
- obtain marketing approval for indications or patient populations that are not as broad as intended or desired;
- obtain marketing approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the treatment removed from the market after obtaining marketing approval.

We could also encounter delays if a clinical study is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board, or DSMB, for such trial or by the FDA or other regulatory authorities. Such authorities may suspend or terminate a clinical study due to a number of

factors, including failure to conduct the clinical study in accordance with regulatory requirements or our clinical protocols, inspection of the clinical study 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 drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical study.

Further, conducting clinical studies in foreign countries, as we may do for certain of our drug candidates, presents additional risks that may delay completion of our clinical studies. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries, including those caused by unforeseen events such as pandemics and public health emergencies similar to the COVID-19 pandemic.

Principal investigators for our clinical studies may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or a regulatory authority concludes that the financial relationship may have affected the interpretation of the trial, the integrity of the data generated at the applicable clinical study site may be questioned and the utility of the clinical study itself may be jeopardized, which could result in the delay or rejection of the marketing application we submit. Any such delay or rejection could prevent or delay us from commercializing our current or future drug candidates.

If we experience termination or delays in the completion of any preclinical study or clinical study of our drug candidates, the commercial prospects of our drug candidates may be harmed, and our ability to generate revenues from any of these drug candidates will be delayed or unrealized. In addition, any delays in completing our clinical studies may increase our costs, slow down our drug candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may significantly harm our business, financial condition and prospects. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical studies may also ultimately lead to the denial of regulatory approval of our drug candidates. If one or more of our drug candidates or our senescence technology generally prove to be ineffective, unsafe or commercially unviable, our platform and pipeline would have significantly diminished value, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

We may not be successful in our efforts to continue to create a pipeline of drug candidates or to develop commercially successful products. If we fail to successfully identify and develop additional drug candidates, our commercial opportunity may be limited.

We are committed to developing senolytic medicines that slow, halt, or reverse diseases of aging, and we are currently advancing multiple senolytic molecules to address a variety of diseases of aging, including ophthalmologic and neurologic disorders. As senolytic medicines are not limited to intervention by a single mode of action or molecular target, we believe that we can modulate a number of biologic pathways in order to trigger the beneficial elimination of senescent cells. However, our core therapeutic approach is based on our belief that senescent cells drive diseases of aging, and that hypothesis has not yet been proven. In addition, we do not know if we will be able to develop medicines that selectively eliminate senescent cells or whether the elimination of such senescent cells will mitigate the effects of or effectively treat any diseases.

In addition, identifying, developing, obtaining regulatory approval and commercializing drug candidates for the treatment of diseases of aging will require substantial additional funding and is prone to the risks of failure inherent in drug development. Research programs to identify drug candidates also require substantial technical, financial and human resources, regardless of whether or not any drug candidates are ultimately identified, and even if our preclinical research programs initially show promise in identifying potential drug candidates, they may fail to yield drug candidates for clinical development.

While we have a number of ongoing drug discovery programs targeting senescent cells, we do not know whether these will be successful, or whether we will be able to identify novel senolytic mechanisms to continue to build our pipeline. We also cannot provide any assurance that we will be able to successfully identify or acquire additional

drug candidates, advance any of these additional drug candidates through the development process, successfully commercialize any such additional drug candidates, if approved, or assemble sufficient resources to identify, acquire, develop or, if approved, commercialize additional drug candidates. If we are unable to successfully identify, acquire, develop and commercialize additional drug candidates, our commercial opportunities may be limited.

It may be many years, if ever, before we develop senolytic medicines capable of systemic administration to treat systemic diseases of aging.

Many diseases of aging may require the development of senolytic medicines that can be administered systemically. We currently do not have systemic senolytic medicines in development, and we do not know whether systemic senolytic approaches will be feasible. We are focusing initially on the development of senolytic molecules for diseases of aging that can be treated by means of local treatment and intend to continue our research into the development of systemic senolytic medicines. However, we are still at a very early stage of developing locally administered senolytic medicines, and we must establish proof-of-concept in humans for local treatment before developing a systemically administered senolytic medicine. We still face significant risks in the development of localized treatments. As a result, it may be many years before we have sufficient human data and scientific understanding to effectively pursue a systemically administered senolytic medicine, if ever.

If we encounter difficulties enrolling patients in our clinical studies, our clinical development activities could be delayed or otherwise adversely affected.

The timely completion of clinical studies in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the study until its conclusion. We may experience difficulties in patient enrollment in our clinical studies for a variety of reasons. The enrollment of patients depends on many factors, some of which could be exacerbated by the COVID-19 pandemic, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to trial sites;
- patients' fear of visiting or traveling to trial sites during the COVID-19 pandemic;
- the design of the trial;
- our ability to recruit clinical study investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the drug candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating; and
- our ability to obtain and maintain patient consents.

In addition, our clinical studies may compete with other clinical studies for drug candidates that are in the same therapeutic areas as our drug candidates. This competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we may conduct some of our clinical studies at the same clinical study sites that some of our competitors use, which will reduce the number of patients who are available for our clinical studies in such clinical study site.

Further, the administration of senolytic medicines designed to eliminate or cause the elimination of senescent cells and thereby modulate their associated SASP may result in unforeseen events, including by harming healthy tissues. As a result, it is possible that safety concerns could negatively affect patient enrollment among the patient populations that we intend to treat, including among those in indications with a low risk of mortality. Delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical studies,

which could prevent completion of these trials and adversely affect our ability to advance the development of our drug candidates.

Our drug candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by our drug candidates could cause us or regulatory authorities to interrupt, delay or halt clinical studies and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. Other than our clinical studies of UBX0101, and our Phase 1 clinical study of UBX1325, which was initiated in October 2020, senolytic medicines designed to eliminate or cause
the elimination of senescent cells have never been tested in humans. As a result, even though UBX0101 was generally well tolerated in our completed Phase 1 and Phase 2 clinical studies, any clinical studies we initiate could reveal a high and unacceptable severity and prevalence of side effects, and it is possible that patients enrolled in such clinical studies could respond in unexpected ways. For instance, in preclinical *in vivo* animal and *ex vivo* human tissue studies, our senolytic molecules have exhibited clearance of senescent cells; however, the elimination of accumulated senescent cells may result in unforeseen events, including harming healthy cells or tissues. In addition, the entry by cells into a senescent state is a natural biological process that we believe may have protective effects, such as halting the proliferation of damaged cells. The treatment of tissues with senolytic molecules could interfere with such protective processes.

If unacceptable side effects arise in the development of our drug candidates, we, the FDA, the IRBs at the institutions in which our studies are conducted, or the DSMB could suspend or terminate our clinical studies, or the FDA or comparable foreign regulatory authorities could order us to cease clinical studies or deny approval of our drug candidates for any or all targeted indications. Treatment-related side effects could also affect patient recruitment or the ability of enrolled patients to complete any of our clinical studies or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our drug candidates to understand the side effect profiles for our clinical studies and upon any commercialization of any of our drug candidates. Inadequate training in recognizing or managing the potential side effects of our drug candidates could result in patient injury or death. Any of these occurrences may harm our business, financial condition and prospects significantly.

In addition, even if we successfully advance any of our drug candidates into and through clinical studies, such trials will likely only include a limited number of subjects and limited duration of exposure to our drug candidates. As a result, we cannot be assured that adverse effects of our drug candidates will not be uncovered when a significantly larger number of patients are exposed to the drug candidate. Further, clinical studies may not be sufficient to determine the effect and safety consequences of taking our drug candidates over a multi-year period. There can be no assurance that it will demonstrate a similarly favorable safety profile in subsequent clinical trials.

If any of our drug candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product;
- we may be required to recall a product or change the way such product is administered to patients;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product or any component thereof;
- regulatory authorities may require the addition of labeling statements, such as a “black box” warning or a contraindication;
- we may be required to implement a Risk Evaluation and Mitigation Strategy, or REMS, or create a Medication Guide outlining the risks of such side effects for distribution to patients;
- we could be sued and held liable for harm caused to patients;

- the product may become less competitive; and
- our reputation may suffer.

Any of the foregoing events could prevent us from achieving or maintaining market acceptance of the particular drug candidate, if approved, and result in the loss of significant revenues to us, which would materially and adversely affect our results of operations and business. In addition, if one or more of our drug candidates or our senescence approach generally prove to be unsafe, our entire platform and pipeline could be affected, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

Even if our current drug candidates or any future drug candidates obtain regulatory approval, they may fail to achieve the broad degree of physician and patient adoption and use necessary for commercial success.

Even if one or more of our drug candidates receive FDA or other regulatory approvals, the commercial success of any of our current or future drug candidates will depend significantly on the broad adoption and use of the resulting product by physicians and patients for approved indications. Our drug candidates may not be commercially successful for a variety of reasons, including: competitive factors, pricing or physician preference, reimbursement by
insurers, the degree and rate of physician and patient adoption of our current or future drug candidates. If approved, the commercial success of our drug candidates will depend on a number of factors, including:

- the clinical indications for which the product is approved and patient demand for approved products that treat those indications;
- the safety and efficacy of our product as compared to other available therapies;
- the availability of coverage and adequate reimbursement from managed care plans, insurers and other healthcare payors for any of our drug candidates that may be approved;
- acceptance by physicians, operators of clinics and patients of the product as a safe and effective treatment;
- physician and patient willingness to adopt a new therapy over other available therapies to treat approved indications;
- overcoming any biases physicians or patients may have toward particular therapies for the treatment of approved indications;
- proper training and administration of our drug candidates by physicians and medical staff;
- public misperception regarding the use of our therapies, or public bias against “anti-aging” companies;
- patient satisfaction with the results and administration of our drug candidates and overall treatment experience, including, for example, the convenience of any dosing regimen;
- the cost of treatment with our drug candidates in relation to alternative treatments and reimbursement levels, if any, and willingness to pay for the product, if approved, on the part of insurance companies and other third-party payers, physicians and patients;
- the willingness of patients to pay for certain of our products, if approved;
- the revenue and profitability that our products may offer a physician as compared to alternative therapies;
- the prevalence and severity of side effects;
- limitations or warnings contained in the FDA-approved labeling for our products;

- the willingness of physicians, operators of clinics and patients to utilize or adopt our products as a solution;
- any FDA requirement to undertake a REMS;
- the effectiveness of our sales, marketing and distribution efforts;
- adverse publicity about our products or favorable publicity about competitive products; and
- potential product liability claims.

We cannot assure you that our current or future drug candidates, if approved, will achieve broad market acceptance among physicians and patients. Any failure by our drug candidates that obtain regulatory approval to achieve market acceptance or commercial success would adversely affect our results of operations.

We rely on third-party suppliers to manufacture preclinical and clinical supplies of our drug candidates and we intend to continue to rely on third parties to produce such preclinical and clinical supplies as well as commercial supplies of any approved product. The loss of these suppliers, or their failure to comply with applicable regulatory requirements or to provide us with sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business.

We do not have the infrastructure or capability internally to manufacture supplies of our drug candidates or the materials necessary to produce our drug candidates for use in the conduct of our clinical studies, and we lack the internal resources and the capability to manufacture any of our drug candidates on a clinical or commercial scale. The facilities used by our contract manufacturers to manufacture our drug candidates are subject to various regulatory requirements and may be subject to the inspection of the FDA or other regulatory authorities. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMPs. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or comparable regulatory authorities in foreign jurisdictions, we may not be able to rely on their manufacturing facilities for the manufacture or our drug candidates. In addition, we have limited 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 finds these facilities inadequate for the manufacture of our drug candidates or if such facilities are subject to enforcement action in the future or are otherwise inadequate, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our drug candidates.

We currently intend to supply all of our drug candidates in all territories for our planned clinical development programs. We currently rely on third parties at key stages in our supply chain. For instance, the supply chains for our current drug candidates involve several manufacturers that specialize in specific operations of the manufacturing process, specifically, raw materials manufacturing, drug substance manufacturing and drug product manufacturing. As a result, the supply chain for the manufacturing of our drug candidates is complicated and we expect the logistical challenges associated with our supply chain to grow more complex as our drug candidates progress through the clinical trial process. Some of these third parties may also be adversely impacted by COVID-19 or other unforeseen events and public health emergencies. For example, one of the manufacturers in our supply chain for UBX0101 experienced a two-week shutdown in April 2020 due to a COVID-19 related incident. While such incident did not impact our supply of UBX0101 for clinical studies being conducted in April 2020, there can be no assurance that our supply chain for any of our candidates and clinical trials will not be disrupted in the future due to the COVID-19 pandemic.

We do not have any control over the process or timing of the acquisition or manufacture of materials by our manufacturers. Further, we have not yet engaged any manufacturers for the commercial supply of our current drug candidates. Although we intend to enter into such agreements prior to commercial launch of any of our drug candidates, we may be unable to enter into any such agreement or do so on commercially reasonable terms, which could have a material adverse impact upon our business. We generally do not begin a preclinical study and we do not intend to initiate any clinical studies unless we believe we have access to a sufficient supply of a drug candidate

to complete such study or trial. In addition, any significant delay in, or quality control problems with respect to, the supply of a drug candidate, or the raw material components thereof, for an ongoing study or trial could considerably
delay completion of our preclinical studies or future clinical studies, product testing and potential regulatory approval of our drug candidates.

Moreover, if there is a disruption to one or more of our third-party manufacturers' or suppliers' relevant operations, or if we are unable to enter into arrangements for the commercial supply of our drug candidates, we will have no other means of producing our current drug candidates until they restore the affected facilities or we or they procure alternative manufacturing facilities or sources of supply. Our ability to progress our preclinical and clinical programs could be materially and adversely impacted if any of the third-party suppliers upon which we rely were to experience a significant business challenge, disruption or failure due to issues such as financial difficulties or bankruptcy, issues relating to other customers such as regulatory or quality compliance issues, or other financial, legal, regulatory or reputational issues.

Additionally, any damage to or destruction of our third-party manufacturers' or suppliers' facilities or equipment may significantly impair our ability to manufacture our drug candidates on a timely basis.

In addition, to manufacture our current drug candidates in the quantities that we believe would be required to meet anticipated market demand, our third-party manufacturers would likely need to increase manufacturing capacity and, in some cases, we would need to secure alternative sources of commercial supply, which could involve significant challenges and may require additional regulatory approvals. In addition, the development of commercial-scale
manufacturing capabilities may require us and our third-party manufacturers to invest substantial additional funds and hire and retain the technical personnel who have the necessary manufacturing experience. Neither we nor our third-party manufacturers may successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all. If our manufacturers or we are unable to purchase the raw materials necessary for the manufacture of our drug candidates on acceptable terms, at sufficient quality levels, or in adequate quantities, if at all, the commercial launch of our current drug candidates or any future drug candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of such drug candidates, if approved.

If we fail to attract and retain senior management and key scientific personnel, we may be unable to successfully develop our current drug candidates or any future drug candidates, conduct our clinical studies and commercialize our current or any future drug candidates.

Our success depends in part on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel. We are highly dependent upon our senior management as well as our senior scientists. In March 2020, our prior Chairman and Chief Executive Officer, Keith R. Leonard, resigned from his position as Chief Executive Officer and was replaced by Anirvan Ghosh, Ph.D. In addition, in July 2020, our prior Chief Financial Officer, Robert C. Goeltz II, resigned from his position as Chief Financial Officer, and he was replaced by Lynne Sullivan. In addition, following the announcement of our Phase 2 clinical trial results for UBX0101, we implemented a corporate restructuring resulting in the elimination of a significant portion of the workforce. These events have resulted in additional loss of personnel, both planned and unplanned. Continued disruption caused by the transition or by the loss of ongoing services of any other members of our senior management team or our senior scientists could delay or prevent the successful development of our product pipeline, initiation or completion of our planned clinical studies or the commercialization of our current drug candidates or any future drug candidates.

Competition for qualified personnel in the biotechnology and pharmaceuticals field is intense due to the limited number of individuals who possess the skills and experience required by our industry. We will need to hire additional personnel as we expand our clinical development and if we initiate commercial activities. We may not be able to attract and retain quality personnel on acceptable terms, or at all. In addition, to the extent we hire personnel
from competitors, we may be subject to allegations that they have been improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output.

We depend on third-party suppliers for key raw materials used in our manufacturing processes, and the loss of these third-party suppliers or their inability to supply us with adequate raw materials could harm our business.

We rely on third-party suppliers for the raw materials required for the production of our drug candidates. Our dependence on these third-party suppliers and the challenges we may face in obtaining adequate supplies of raw materials involve several risks, including limited control over pricing, availability, and quality and delivery schedules. As a small company, our negotiation leverage is limited, and we are likely to get lower priority than our competitors who are larger than we are. We cannot be certain that our suppliers will continue to provide us with the quantities of these raw materials that we require or satisfy our anticipated specifications and quality requirements. Any supply interruption in limited or sole sourced raw materials could materially harm our ability to manufacture our drug candidates until a new source of supply, if any, could be identified and qualified. We may be unable to find a sufficient alternative supply channel in a reasonable time or on commercially reasonable terms. Any performance failure on the part of our suppliers could delay the development and potential commercialization of our drug candidates, including limiting supplies necessary for clinical studies and regulatory approvals, which would have a material adverse effect on our business.

We rely on third parties in the conduct of critical portions of our preclinical studies and intend to rely on third parties in the conduct of critical portions of our future clinical studies. If these third parties do not successfully carry out their contractual duties, fail to comply with applicable regulatory requirements or meet expected deadlines, we may be unable to obtain regulatory approval for our drug candidates. Some of these third parties may also be adversely
impacted by COVID-19 or other unforeseen events and public health emergencies.

We currently do not have the ability to independently conduct preclinical studies that comply with the regulatory requirements known as good laboratory practice, or GLP, requirements. We also do not currently have the ability to independently conduct any clinical studies. The FDA and regulatory authorities in other jurisdictions require us to comply with regulations and standards, commonly referred to as good clinical practice, or GCP, requirements for
conducting, monitoring, recording and reporting the results of clinical studies, in order to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical studies. We rely on medical institutions, clinical investigators, contract laboratories and other third parties, such as CROs, to conduct GLP-compliant preclinical studies and GCP-compliant clinical studies on our drug candidates properly and on time. While we have agreements governing their activities, we control only certain aspects of their activities and have limited influence over their actual performance. The third parties with whom we contract for execution of our GLP-compliant preclinical studies and our GCP-compliant clinical studies play a significant role in the conduct of these studies and trials and the subsequent collection and analysis of data. These third parties are not our employees and, except for restrictions imposed by our contracts with
such third parties, we have limited ability to control the amount or timing of resources that they devote to our programs. Although we rely on these third parties to conduct our GLP-compliant preclinical studies and GCP-compliant clinical studies, we remain responsible for ensuring that each of our GLP preclinical studies and clinical studies is conducted in accordance with its investigational plan and protocol and applicable laws and regulations, and our reliance on the CROs does not relieve us of our regulatory responsibilities.

Many of the third parties with whom we contract may also have relationships with other commercial entities, potentially including our competitors, for whom they may also be conducting clinical studies or other drug development activities that could harm our competitive position. If the third parties conducting our preclinical studies or our clinical studies do not adequately perform their contractual duties or obligations, experience significant business challenges, disruptions or failures, do not meet expected deadlines, terminate their agreements with us or need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our protocols or to GCPs, or for any other reason, we may need to enter into new arrangements with alternative third parties. This could be difficult, costly or impossible, and our preclinical studies or clinical studies may need to be extended, delayed, terminated or repeated. As a result, we may not be able to obtain regulatory approval in a timely fashion, or at all, for the applicable drug candidate, our financial results and the commercial prospects for our drug candidates would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

We are currently conducting and will continue to conduct preclinical trials and contract with third-party manufacturers in foreign countries, which could expose us to risks that could have a material adverse effect on the success of our business.

We have conducted in the past and are currently conducting preclinical trials in the United States, Canada and China and contract with third-party suppliers in the United States, China and Denmark. Accordingly, we are subject to risks associated with doing business globally, including commercial, political, and financial risks. In addition, we are subject to potential disruption caused by military conflicts; potentially unstable governments or legal systems; civil or political upheaval or unrest; local labor policies and conditions; possible expropriation, nationalization, or confiscation of assets; problems with repatriation of foreign earnings; economic or trade sanctions; closure of markets to imports; anti-American sentiment; terrorism or other types of violence in or outside the United States; health pandemics; and a significant reduction in global travel. The COVID-19 pandemic could disrupt the ability of our third-party service providers to deliver agreed upon services, regardless of our third-party service provider's physical location Our success will depend, in part, on our ability to overcome the challenges we encounter with respect to these risks and other factors affecting U.S. companies with global operations. If our global clinical trials or foreign third-party suppliers were to experience significant disruption due to these risks or for other reasons, it could have a material adverse effect on our business, financial condition, results of operations and prospects.

We face significant competition in an environment of rapid technological and scientific change, and our drug candidates, if approved, will face significant competition and our failure to effectively compete may prevent us from achieving significant market penetration. Most of our competitors have significantly greater resources than we do, and we may not be able to successfully compete.

The biotechnology and pharmaceutical industries in particular are characterized by rapidly advancing technologies, intense competition and a strong emphasis on developing proprietary therapeutics. Numerous companies are engaged in the development, patenting, manufacturing and marketing of healthcare products competitive with those that we are developing. We face competition from a number of sources, such as pharmaceutical companies, generic drug companies, biotechnology companies and academic and research institutions, many of which have greater financial resources, marketing capabilities, sales forces, manufacturing capabilities, research and development capabilities, clinical study expertise, intellectual property portfolios, experience in obtaining patents and regulatory approvals for drug candidates and other resources than we do. Some of the companies that offer competing products also have a broad range of other product offerings, large direct sales forces and long-term customer relationships with our target physicians, which could inhibit our market penetration efforts. Mergers and acquisitions in the pharmaceutical industry may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through
collaborative arrangements with large and established companies. These competitors also compete with us in
recruiting and retaining qualified scientific and management personnel and establishing clinical study sites and patient registration for clinical studies, as well as in acquiring technologies complementary to, or necessary for, our programs. In addition, certain of our drug candidates, if approved, may compete with other products that treat diseases of aging, including over the counter, or OTC, treatments, for a share of some patients' discretionary budgets and for physicians' attention within their clinical practices.

We are aware of other companies seeking to develop treatments to prevent or treat diseases of aging through various biological pathways, including Calico. Within our lead senolytic program in ophthalmology diseases, our drug candidates would compete against current therapies from a wide range of companies and technologies, including current standard of care treatments such as anti-VEGF antibodies (bevacizumab, ranibizumab, aflibercept, brolucizumab), intravitreal steroid (dexamethasone), and pan-retinal photocoagulation by laser E. There are also potentially disease-modifying therapeutics being developed by several pharmaceutical and biotechnology companies, including Roche/Genentech, Kodiak, Graybug, Ocular Therapeutix, and Regeneron.

Further, we believe that potential competitors may be able to develop senolytic medicines utilizing well-established molecules and pathways, which could enable the development of competitive drug candidates utilizing the same cellular senescence biological theories.

Certain alternative treatments offered by competitors may be available at lower prices and may offer greater efficacy or better safety profiles. Furthermore, currently approved products could be discovered to have application for

treatment of diseases of aging generally, which could give such products significant regulatory and market timing advantages over any of our drug candidates. Our competitors also may obtain FDA, EMA or other regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product exclusivity from the FDA for indications our drug candidates are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Newly developed systemic or non-systemic treatments that replace existing therapies that currently are only utilized in patients suffering from severe disease may also have lessened side effects or reduced prices compared to current therapies, which make them more attractive for patients suffering from mild to moderate disease. Even if a generic or OTC product is less effective than our drug candidates, it may be more quickly adopted by physicians and patients than our competing drug candidates based upon cost or convenience.

The successful commercialization of our drug candidates will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage, reimbursement levels and pricing policies. Failure to obtain or maintain coverage and adequate reimbursement for our drug candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

The availability and adequacy of coverage and reimbursement by governmental healthcare programs such as Medicare and Medicaid, private health insurers and other third-party payors are essential for most patients to be able to afford prescription medications such as our drug candidates, assuming FDA approval. Our ability to achieve acceptable levels of coverage and reimbursement for products by governmental authorities, private health insurers
and other organizations will have an effect on our ability to successfully commercialize our drug candidates. Assuming we obtain coverage for our drug candidates by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. We cannot be sure that coverage and reimbursement in the United States, the EU or elsewhere will be available for our drug candidates or any product that we may develop, and any reimbursement that may become available may be decreased or eliminated in the future.

Third-party payors increasingly are challenging prices charged for pharmaceutical products and services, and many third-party payors may refuse to provide coverage and reimbursement for particular drugs or biologics when an equivalent generic drug, biosimilar or a less expensive therapy is available. It is possible that a third-party payor may consider our drug candidates as substitutable and only offer to reimburse patients for the cost of the less expensive product. Even if we show improved efficacy or improved convenience of administration with our drug candidates, pricing of existing third-party therapeutics may limit the amount we will be able to charge for our drug candidates. These payors may deny or revoke the reimbursement status of a given product or establish prices for new or existing marketed products at levels that are too low to enable us to realize an appropriate return on our investment in our drug candidates. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our drug candidates and may not be able to obtain a satisfactory financial return on our investment in the development of drug candidates.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, third-party payors, including private and governmental payors, such as the Medicare and Medicaid programs, play an important role in determining the extent to which new drugs and biologics will be covered. The Medicare and Medicaid programs increasingly are used as models in the United States for how private payors and other governmental payors develop their coverage and reimbursement policies for drugs and biologics. Some third-party payors may require pre-approval of coverage for new or innovative devices or drug therapies before they will reimburse healthcare providers who use such therapies. We cannot predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our drug candidates.

No uniform policy for coverage and reimbursement for products exists among third-party payors in the United States. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our drug candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Furthermore, rules and regulations regarding reimbursement change frequently, in some cases on short notice, and we believe that changes in these rules and regulations are likely.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe and other countries have and will continue to put pressure on the pricing and usage of our drug candidates. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Other countries allow companies to fix their own prices for medical products but monitor and control company profits.

Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our drug candidates. Accordingly, in markets outside the United States, the reimbursement for our drug candidates may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

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 drug candidates. We expect to experience pricing pressures in connection with the sale of our drug candidates due to the trend toward managed health care, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and biologics and surgical procedures and other treatments, has become intense. As a result, increasingly high barriers are being erected to the entry of new products.

We currently have no sales organization. If we are unable to establish sales capabilities on our own or through third parties, we may not be able to market and sell our drug candidates effectively in the U.S. and foreign jurisdictions, if approved, or generate product revenue.

We currently do not have a marketing or sales organization. In order to commercialize our drug candidates in the United States and foreign jurisdictions, we must build our marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If any of our drug candidates receive regulatory approval, we expect to establish a sales organization with technical expertise and supporting distribution capabilities to commercialize each such drug candidate, which will be expensive and time consuming. We have no prior experience in the marketing, sale and distribution of pharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain, and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. We may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our drug candidates. If we are not successful in commercializing our drug candidates or any future drug candidates, either on our own or through arrangements with one or more third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

We will need to increase the size of our organization, and we may experience difficulties in managing growth.

As of December 31, 2020, we had 61 full-time employees. We will need to continue to expand our managerial, operational, finance and other resources in order to manage our operations and clinical studies, continue our development activities and commercialize our current drug candidates or any future drug candidates. Our management and personnel, systems and facilities currently in place may not be adequate to support this future growth. Our need to effectively execute our growth strategy requires that we:

- manage our clinical studies effectively;
- identify, recruit, retain, incentivize and integrate additional employees, including sales personnel;

- manage our internal research, development and operational efforts effectively while carrying out our contractual obligations to third parties; and
- continue to improve our operational, financial and management controls, reports systems and procedures.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our current or future drug candidates.

We face an inherent risk of product liability as a result of the clinical testing of our drug candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, and a failure to warn of dangers inherent in the product, negligence, strict liability, and a breach of warranty. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our drug candidates.

Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our current or future drug candidates;
- injury to our reputation;
- withdrawal of clinical study participants;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- regulatory investigations, product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue; and
- the inability to commercialize our current or any future drug candidates.

Our inability to obtain and maintain sufficient product liability insurance at an acceptable cost and scope of coverage to protect against potential product liability claims could prevent or inhibit the commercialization of our current or any future drug candidates we develop. We currently carry product liability insurance covering our clinical studies. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or
settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions and deductibles, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient funds to pay such amounts. Moreover, in the future, we may not be able to
maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. If and when we obtain approval for marketing any of our drug candidates, we intend to expand our insurance coverage to include the sale of such drug candidate; however, we may be unable to obtain this liability insurance on commercially reasonable terms or at all.

Our existing collaborations as well as additional collaboration arrangements that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our drug candidates.

We utilize external collaborations and currently maintain approximately five active early-stage research and discovery focused collaborations. In the future, we may seek additional collaboration arrangements for the commercialization, or potentially for the development, of certain of our drug candidates depending on the merits of retaining commercialization rights for ourselves as compared to entering into collaboration arrangements. To the extent that we decide to enter into additional collaboration agreements in the future, we may face significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time-consuming to negotiate, document, implement and maintain and challenging to manage. We may not be successful in our efforts to prudently manage our existing collaborations or to enter new ones should we chose to do so. The terms of new collaborations, or other arrangements that we may establish may not be favorable to us.

The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators and partners. Collaborations are subject to numerous risks, which may include risks that:

- collaborators and partners have significant discretion in determining the efforts and resources that they will apply to collaborations and they may not devote the level of effort or resources we expect;
- collaborators may not pursue development and commercialization of our drug candidates or may elect not to continue or renew development or commercialization programs based on clinical study results, changes in their strategic focus due to their acquisition of competitive products or their internal development of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical studies, provide insufficient funding for a clinical study program, stop a clinical study, abandon a drug candidate, repeat or conduct new clinical studies or require a new formulation of a drug candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or drug candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our current or future drug candidates or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated, resulting in a need for additional capital to pursue further development or commercialization of the applicable current or future drug candidates;
- collaborators may own or co-own intellectual property covering products that results from our collaborating with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property;
- disputes may arise with respect to the ownership of any intellectual property developed pursuant to our collaborations;
- a collaborator’s sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings; and

- collaborators may be adversely impacted by COVID-19 or other unforeseen events and public health emergencies.

Unfavorable global economic or political 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. Furthermore, the market for products with the potential to treat diseases of aging, particularly those affecting large populations in a wide range of geographic locations, may be particularly vulnerable to unfavorable economic conditions. A global financial crisis or a global or regional political disruption, including most recently as a result of the COVID-19 pandemic, have caused and could continue to cause extreme volatility in the capital and credit markets. A severe or prolonged economic downturn or political disruption could result in a variety of risks to our business, including weakened demand for our current drug candidates or any future drug candidates, if approved, and our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy or political disruption could also strain our manufacturers or suppliers, possibly resulting in supply disruption, or cause our customers to delay making payments for our services. Weakened or declining economic conditions could be caused by a number of factors. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the political or economic climate and financial market conditions could adversely impact our business.

Risks Related to Intellectual Property

Our senolytic medicine platform and any future products that we commercialize could be alleged to infringe patent rights and other proprietary rights of third parties, which may require costly litigation and, if we are not successful, could cause us to pay substantial damages and/or limit our ability to commercialize our products.

Our commercial success depends on our ability to develop, manufacture and market our senolytic medicines and future drug candidates and use our proprietary technology without infringing the patents and other proprietary rights of third parties. Intellectual property disputes can be costly to defend and may cause our business, operating results and financial condition to suffer. We operate in an industry with extensive intellectual property litigation. As the biopharmaceutical and pharmaceutical industries expand and more patents are issued, the risk increases that there may be patents issued to third parties that relate to our products and technology of which we are not aware or that we may need to challenge to continue our operations as currently contemplated.

Whether merited or not, we may face allegations that we have infringed the trademarks, copyrights, patents and other intellectual property rights of third parties, including patents held by our competitors or by non-practicing entities. We may also face allegations that our employees have misappropriated the intellectual property rights of their former employers or other third parties.

Litigation may make it necessary to defend ourselves by determining the scope, enforceability and validity of third-party proprietary rights, or to establish our proprietary rights. Regardless of whether claims that we are infringing patents or other intellectual property rights have merit, the claims can be time consuming, divert management attention and financial resources and are costly to evaluate and defend. Results of any such litigation are difficult to predict and may require us to stop treating certain conditions, obtain licenses or modify our products and features while we develop non-infringing substitutes, or may result in significant settlement costs. For example, litigation can involve substantial damages for infringement (and if the court finds that the infringement was willful, we could be ordered to pay treble damages and the patent owner's attorneys' fees), and the court could prohibit us from selling or licensing our products unless the third party licenses rights to us, which it is not required to do at a commercially reasonable price or at all. If a license is available from a third party, we may have to pay substantial royalties, upfront fees or grant cross-licenses to intellectual property rights for our products. We may also have to redesign our products so they do not infringe third-party intellectual property rights, which may not be possible at all or may require substantial monetary expenditures and time, during which our products may not be available for manufacture, use, or sale.

In addition, patent applications in the United States and many international jurisdictions are typically not published until 18 months after the filing of certain priority documents (or, in some cases, are not published until they issue as

patents) and publications in the scientific literature often lag behind actual discoveries. Thus, we cannot be certain that others have not filed patent applications or made public disclosures relating to our technology or our contemplated technology. A third party may have filed, and may in the future file, patent applications covering our products or technology similar to ours. Any such patent application may have priority over our patent applications or patents, which could further require us to obtain rights to issued patents covering such technologies. If another party has filed a U.S. patent application on inventions similar to ours, depending on whether the timing of the filing date falls under certain patent laws, we may have to participate in a priority contest (such as an interference proceeding) declared by the U.S. Patent and Trademark Office, to determine priority of invention in the United States. The costs of patent and other proceedings could be substantial, and it is possible that such efforts would be unsuccessful if it is determined that the other party had independently arrived at the same or similar invention prior to our own invention, resulting in a loss of our U.S. patent position with respect to such inventions

From time to time, we may be subject to legal proceedings and claims in the ordinary course of business with respect to intellectual property. Although we are not currently subject to any claims from third parties asserting infringement of their intellectual property rights, in the future, we may receive claims from third parties asserting infringement of their intellectual property rights. Future litigation may be necessary to establish our intellectual property rights or to defend ourselves by determining the scope, enforceability and validity of third-party intellectual property rights. There can be no assurance with respect to the outcome of any current or future litigation brought by or against us, and the outcome of any such litigation could have a material adverse impact on our business, operating results and financial condition. Litigation is inherently unpredictable and outcomes are uncertain. Further, as the costs and outcome of these types of claims and proceedings can vary significantly, it is difficult to estimate potential losses that may occur. Accordingly, we are unable at this time to estimate the effects of these potential future lawsuits on our financial condition, operations or cash flows.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock. Finally, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

If we are unable to obtain, maintain and enforce intellectual property protection directed to our senolytic medicine platform and any future technologies that we develop, others may be able to make, use, or sell products substantially the same as ours, which could adversely affect our ability to compete in the market.

As of March 1, 2021, we own, co-own, or have an exclusive license in certain fields of use to more than 150 patents and pending applications in the United States and foreign jurisdictions. This portfolio includes 43 issued and allowed U.S. patents and applications and 32 granted and allowed foreign patents and applications, respectively.

We have not pursued or maintained, and may not pursue or maintain in the future, patent protection for our products in every country or territory in which we may sell our products. In addition, we cannot be sure that any of our pending patent applications or pending trademark applications will issue or that, if issued, they will issue in a form that will be advantageous to us. The U.S. Patent and Trademark Office, or the USPTO, international patent offices or judicial bodies may deny or significantly narrow claims made under our patent applications and our issued patents may be successfully challenged, may be designed around, or may otherwise be of insufficient scope to provide us with protection for our commercial products. Further, the USPTO, international trademark offices or judicial bodies may deny our trademark applications and, even if published or registered, these trademarks may not effectively protect our brand and goodwill. Like patents, trademarks also may be successfully opposed or challenged.

We cannot be certain that the steps we have taken will prevent unauthorized use or unauthorized reverse engineering of our technology. Moreover, third parties may independently develop technologies that are competitive with ours and such competitive technologies may or may not infringe our intellectual property. The enforcement of our intellectual property rights also depends on the success of our legal actions against these infringers in the respective

country or forum, but these actions may not be successful. As with all granted intellectual property, such intellectual property may be challenged, invalidated or circumvented, may not provide specific protection and/or may not prove to be enforceable in actions against specific alleged infringers.

The market for biopharmaceuticals, pharmaceuticals and treatments for diseases of aging is highly competitive and subject to rapid technological change. Our success depends, in part, upon our ability to maintain a competitive position in the development and protection of technologies and products for use in these fields and upon our ability to obtain, maintain and enforce our intellectual property rights in connection therewith. We seek to obtain and maintain patents and other intellectual property rights to restrict the ability of others to market products that misappropriate our technology and/or infringe our intellectual property to unfairly and illegally compete with our products. If we are unable to protect our intellectual property and proprietary rights, our competitive position and our business could be harmed, as third parties may be able to make, use, or sell products that are substantially the same as ours without incurring the sizeable development and licensing costs that we have incurred, which would adversely affect our ability to compete in the market.

We use a combination of patents, trademarks, know-how, confidentiality procedures and contractual provisions to protect our proprietary technology. However, these protections may not be adequate and may not provide us with any competitive advantage. For example, patents may not issue from any of our currently pending or any future patent applications, and our issued patents and any future patents that may issue may not survive legal challenges to
their scope, validity or enforceability, or provide significant protection for us.

If we or one of our current or future collaborators were to initiate legal proceedings against a third party to enforce a patent covering one of our current drug candidates or future drug candidates, the defendant could counterclaim that our patent is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace.

Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or nonenablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before the USPTO, even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable.

With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our drug candidates. Such a loss of patent protection would have a material adverse impact on our business.

Even if our patents are determined by a court to be valid and enforceable, they may not be interpreted sufficiently broadly to prevent others from marketing products similar to ours or designing around our patents. For example, third parties may be able to make products that are similar to ours but that are not covered by the claims of our patents. Third parties may assert that we or our licensors were not the first to make the inventions covered by our issued patents or pending patent applications. The claims of our issued patents or patent applications when issued may not cover our proposed commercial technologies or the future products that we develop. We may not have freedom to commercialize unimpeded by the patent rights of others. Third parties may have dominating, blocking, or other patents relevant to our technology of which we are not aware. There may be prior public disclosures or art that
could be deemed to invalidate one or more of our patent claims. Further, we may not develop additional proprietary technologies in the future, and, if we do, they may not be patentable.

Patent law can be highly uncertain and involve complex legal and factual questions for which important principles remain unresolved. In the United States and in many international jurisdictions, policy regarding the breadth of claims allowed in patents can be inconsistent. The U.S. Supreme Court and the Court of Appeals for the Federal Circuit have made, and will likely continue to make, changes in how the patent laws of the United States are interpreted. Similarly, international courts have made, and will likely continue to make, changes in how the patent laws in their respective jurisdictions are interpreted. We cannot predict future changes in the interpretation of patent laws or changes to patent laws that might be enacted into law by U.S. and international legislative bodies. Those

changes may materially affect our patents, our ability to obtain patents or the patents and patent applications of our licensors. Patent reform legislation in the United States could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. For example, on September 16, 2011, the Leahy-Smith America Invents Act, or Leahy-Smith Act, was signed into law. The Leahy-Smith Act included a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art, may affect patent litigation, and switch the U.S. patent system from a "first-to-invent" system to a "first-to-file" system. Under a "first-to-file" system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The U.S. Patent and Trademark Office recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first-to-file provisions, only became effective on March 16, 2013. The Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, which could have a material adverse effect on our business and financial condition.

In addition, we have a number of international patents and patent applications and expect to continue to pursue patent protection in many of the significant markets in which we intend to do business. The laws of some international jurisdictions may not protect intellectual property rights to the same extent as laws in the United States, and many companies have encountered significant difficulties in obtaining, protecting, and defending such rights in international jurisdictions. If we encounter such difficulties or we are otherwise precluded from effectively protecting our intellectual property rights in international jurisdictions, our business prospects could be substantially harmed.

Varying filing dates in international countries may also permit intervening third parties to allege priority to certain technology.

Patent terms may be shortened or lengthened by, for example, terminal disclaimers, patent term adjustments, supplemental protection certificates, and patent term extensions. Patent term extensions and supplemental protection certificates, and the like, may be impacted by the regulatory process and may not significantly lengthen the patent term. Non-payment or delay in payment of patent fees or annuities, delay in patent filings or delay in extension
filing (including any patent term extension or adjustment filing), whether intentional or unintentional, may also result in the loss of patent rights important to our business. Certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. In addition, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these
countries, the patent owner may have limited remedies, which could materially diminish the value of any patents.

In addition to the protection afforded by patents, we rely on confidentiality agreements to protect confidential information and proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce and any other elements of our drug candidate discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors and contractors. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our confidential information or proprietary technology and processes. We also seek to preserve the integrity and confidentiality of our data and other confidential information by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached and detecting the disclosure or misappropriation of confidential information and enforcing a claim that a party illegally disclosed or misappropriated confidential information is difficult, expensive and time-consuming, and the outcome is unpredictable. Further, we may not be able to obtain adequate remedies for any breach. In addition, our confidential information may otherwise become known or be independently discovered by competitors, in which case we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. We may in the future rely on trade secret protection, which would be subject to the risks identified above with respect to confidential information.

Monitoring unauthorized use of our intellectual property is difficult and costly. From time to time, we review our competitors' products, and may in the future seek to enforce our patents or other rights against potential infringement. However, the steps we have taken to protect our proprietary rights may not be adequate to prevent misappropriation of our intellectual property. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. Our competitors may also independently develop similar technology. Any inability to meaningfully protect our intellectual property could result in competitors offering products that incorporate our product or service features, which could reduce demand for our products. In addition, we may need to defend our patents from third-party challenges, such as (but not limited to) interferences, derivation proceedings, reexamination proceedings, post-grant review, inter partes review, third-party submissions, oppositions, nullity actions or other patent proceedings. We may need to initiate infringement claims or litigation.

Adverse proceedings such as litigation can be expensive, time consuming and may divert the efforts of our technical and managerial personnel, which could in turn harm our business, whether or not we receive a determination favorable to us. In addition, in an infringement proceeding, a court or other judicial body may decide that the patent we seek to enforce is invalid or unenforceable, or may refuse to stop the other party from using the technology at
issue on the grounds that the patent in question does not cover the technology in question. An adverse result in any litigation could put one or more of our patents at risk of being invalidated or interpreted narrowly. Some of our competitors may be able to devote significantly more resources to intellectual property litigation and may have significantly broader patent portfolios to assert against us if we assert our rights against them. Further, because of the substantial discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be disclosed or otherwise compromised during litigation.

We may not be able to correctly estimate or control our future operating expenses in relation to obtaining intellectual property, enforcing intellectual property and/or defending intellectual property, which could affect operating expenses. Our operating expenses may fluctuate significantly in the future as a result of a variety of factors, including the costs of preparing, filing, prosecuting, defending, and enforcing patent and trademark claims and other
intellectual property-related costs, including adverse proceedings (such as litigation) costs.

Our intellectual property agreements with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology or increase our financial or other obligations to our licensors.

Certain provisions in our intellectual property agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology, or affect financial or other obligations under the relevant agreement,
either of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact conceives or develops intellectual property that we regard as our own. Our assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

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.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented, declared generic or conflict with third-party rights. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition by potential partners or customers in our markets of interest. In addition, third parties may file first for our trademarks in certain countries. If they succeeded in registering such trademarks, and if we were not successful in challenging such third-party rights, we may not be able to use these trademarks to market our products in those countries. In such cases, over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then our marketing abilities may be impacted.

If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected.

We may not be able to protect our proprietary information and technology adequately. Although we use reasonable efforts to protect our proprietary information, technology, and know-how, our employees, consultants, contractors and outside scientific advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using any of our proprietary information, technology or knowhow
is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect proprietary information, technology, and know-how. We rely, in part, on non-disclosure and confidentiality agreements with our employees, consultants and other parties to protect our proprietary information, technology, and know-how. These agreements may be breached and we may not have adequate remedies for any breach. Moreover, others may independently develop similar or equivalent proprietary information, and third parties may otherwise gain access to our proprietary knowledge.

Risks Related to Government Regulation

Even if we obtain regulatory approval for a drug candidate, our products will remain subject to regulatory scrutiny.

If our drug 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.

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 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 approved marketing application.
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.

We will have to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs and biologics are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have approval. The holder of an approved
application must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical studies to verify the safety and efficacy of our products in general or in specific patient subsets. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning letters;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approval;
- suspend any of our clinical studies;
- refuse to approve pending applications or supplements to approved applications submitted by us;

- impose restrictions on our operations, including closing our contract manufacturers' facilities; or
- seize or detain products or require a product recall.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our products. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

Moreover, 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 drug candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, the results of the 2020 U.S. Presidential Election may impact our business and industry.

Namely, the Trump administration took several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict whether or how these orders will be implemented, or whether they will be rescinded and replaced under the Biden administration. The policies and priorities of the new administration are unknown and could materially impact the regulations governing our product candidates. 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 be subject to enforcement action, and we may not achieve or sustain profitability.

If any of our small molecule drug candidates obtain regulatory approval, additional competitors could enter the market with generic versions of such drugs, which may result in a material decline in sales of affected products.

Under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, a pharmaceutical manufacturer may file an abbreviated new drug application, or ANDA, seeking approval of a generic version of an approved, small molecule innovator product. Under the Hatch-Waxman Act, a manufacturer may also submit a new drug application, or NDA, under section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act that
references the FDA's prior approval of the small molecule innovator product. A 505(b)(2) NDA product may be for a new or improved version of the original innovator product. The Hatch-Waxman Act also provides for certain periods of regulatory exclusivity, which preclude FDA approval (or in some circumstances, FDA filing and review) of an ANDA or 505(b)(2) NDA. In addition to the benefits of regulatory exclusivity, an innovator NDA holder may
have patents claiming the active ingredient, product formulation or an approved use of the drug, which would be listed with the product in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," known as the Orange Book. If there are patents listed in the Orange Book for a product, a generic or 505(b)(2) applicant that seeks to market its product before expiration of the patents must include in their applications what is known as a "Paragraph IV" certification, challenging the validity or enforceability of, or claiming non-infringement of, the listed patent or patents. Notice of the certification must be given to the patent owner and NDA holder and if, within 45 days of receiving notice, either the patent owner or NDA holder sues for patent infringement, approval of the ANDA or 505(b)(2) NDA is stayed for up to 30 months.

Accordingly, if any of our small molecule drug candidates, such as UBX1325, are approved, competitors could file ANDAs for generic versions of our small molecule drug products or 505(b)(2) NDAs that reference our small molecule drug products. If there are patents listed for our small molecule drug products in the Orange Book, those ANDAs and 505(b)(2) NDAs would be required to include a certification as to each listed patent indicating whether the ANDA applicant does or does not intend to challenge the patent. We cannot predict which, if any, patents in our current portfolio or patents we may obtain in the future will be eligible for listing in the Orange Book, how any generic competitor would address such patents, whether we would sue on any such patents, or the outcome of any such suit.

We may not be successful in securing or maintaining proprietary patent protection for products and technologies we develop or license. Moreover, if any of our owned or in-licensed patents that are listed in the Orange Book are successfully challenged by way of a Paragraph IV certification and subsequent litigation, the affected product could immediately face generic competition and its sales would likely decline rapidly and materially.

Any biologic, or large molecule, drug candidates for which we intend to seek approval may face competition sooner than anticipated.

If we are successful in achieving regulatory approval to commercialize any biologic drug candidate faster than our competitors, such drug candidates may face competition from biosimilar products. In the United States, large molecule drug candidates are regulated by the FDA as biologic products subject to approval under the biologics license application, or BLA, pathway. The Biologics Price Competition and Innovation Act of 2009, or BPCIA, creates an abbreviated pathway for the approval of biosimilar and interchangeable biologic products following the approval of an original BLA. The abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing brand product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the original branded product was approved under a BLA. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty.

Moreover, the extent to which a biosimilar product, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biologic products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing. In addition, a competitor could decide to forego the biosimilar approval path and submit a full BLA after completing its own preclinical studies
and clinical studies. In such cases, any exclusivity to which we may be eligible under the BPCIA would not prevent the competitor from marketing its product as soon as it is approved.

If competitors are able to obtain marketing approval for biosimilars referencing our large molecule drug candidates, if approved, such products may become subject to competition from such biosimilars, with the attendant competitive pressure and potential adverse consequences. Such competitive products may be able to immediately compete with us in each indication for which our drug candidates may have received approval.

We may seek orphan drug designation for certain future drug candidates, but we may be unable to obtain such designations or to maintain the benefits associated with orphan drug designation, including market exclusivity, which may cause our revenue, if any, to be reduced.

We may pursue orphan drug designation for certain of our future drug candidates. Under the Orphan Drug Act, the FDA may designate a drug or biologic product as an orphan drug if it is intended to treat a rare disease or condition, defined as a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United State. In the European Union, the EMA's Committee for Orphan Medicinal Products, or COMP, grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention, or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union. Additionally, designation is granted for products intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating or serious and chronic condition when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the drug or biological product or where there is no satisfactory method of diagnosis, prevention, or treatment, or, if such a method exists, the medicine must be of significant benefit to those affected by the condition.

In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical study costs, tax advantages, and application 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 is unable to assure sufficient product quantity for the

orphan patient population. In the European Union, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers and ten years of market exclusivity following drug or biological product approval. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity.

Even if we obtain orphan drug designation, we may not be the first to obtain marketing approval for any particular orphan indication due to the uncertainties associated with developing pharmaceutical products. Further, even if we obtain orphan drug exclusivity for a drug candidate, that exclusivity may not effectively protect the product from

competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan drug is approved, the FDA or EMA can subsequently approve the same drug with the same active moiety for the same condition if the FDA or EMA concludes that the later drug is clinically superior in that it is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the

development time or regulatory review time of a drug or biologic nor gives the drug or biologic any advantage in the regulatory review or approval process.

Enacted and future healthcare legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our drug candidates and may affect the prices we may set.

In the United States, the EU and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the U.S. 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 ACA, as amended by the Health Care and Education Reconciliation Act, or collectively the Affordable Care Act, was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA, those of greatest importance to the pharmaceutical and biotechnology industries include the following:

- an annual, non-deductible fee payable by any entity that manufactures or imports certain branded prescription drugs and biologic agents (other than those designated as orphan drugs), which is apportioned among these entities according to their market share in certain government healthcare programs;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient drugs to be covered under Medicare Part D;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price for branded and generic drugs, respectively;
- 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;
- extension of a manufacturer’s Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer’s Medicaid rebate liability;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board, which, once empaneled, will have the authority to recommend certain changes to the Medicare program that could result in reduced payments for prescription

drugs and those recommendations could have the effect of law unless overruled by a supermajority vote of Congress; and

- establishment of a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act. For example, the Tax Cuts and Jobs Act of 2017, or the Tax Act, includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additionally, on December 14, 2018, a U.S. District Court Judge in Texas ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Act. On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the district court's decision that the individual mandate was unconstitutional but remanded the case back to the District Court to determine whether the
remaining provisions of the ACA are invalid as well. The U.S. Supreme Court is currently reviewing the case, although it is unclear how the Supreme Court will rule. In addition, there may be other efforts to challenge, repeal or replace the ACA that may impact our business or financial condition.

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, led to aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2021, unless additional action is taken by Congress. In addition, in January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Individual states in the United States have also become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legally mandated price controls on payment amounts by third-party payors or other restrictions could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our drug candidates or put pressure on our product pricing. Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, CMS may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products.

In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize our drug candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy. National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our drug candidates, restrict or regulate post-approval activities and affect our ability to commercialize our drug candidates, if approved. In markets outside of the United States and EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

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

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

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

Such laws include:

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

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

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

- the FDCA, which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices;

- the U.S. Public Health Service Act, which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product;

- the U.S. Physician Payments Sunshine Act and its implementing regulations, which require certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children’s Health Insurance Program to report annually to the government information related to certain payments and other transfers of value to physicians (defined to include doctors, dentists,

optometrists, podiatrists and chiropractors), certain other healthcare providers starting in 2022, and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members;

- analogous U.S. state laws and regulations, including: state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; and state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; and

- similar healthcare laws and regulations in the EU and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers.

Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from government-funded healthcare programs, such as Medicare and Medicaid or similar programs in other countries or jurisdictions, disgorgement, individual imprisonment, contractual damages, reputational harm,
diminished profits and the curtailment or restructuring of our operations. Further, defending against any such actions can be costly, time-consuming and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

U.S. tax legislation and future changes to applicable U.S. tax laws and regulations may have a material adverse effect on our business, financial condition and results of operations.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, or interpreted, changed, modified or applied adversely to us, any of which could adversely affect our business operations and financial performance. We are currently unable to predict whether such changes will occur and, if so, the ultimate impact on our business. To the extent that such changes have a negative impact on us, our suppliers or our customers, including as a result of related uncertainty, these changes may materially and adversely impact our business, financial condition, results of operations and cash flows.

Risks Related to Ownership of Our Common Stock

Our stock price may be volatile and you may not be able to resell shares of our common stock at or above the price you paid.

The trading price of our common stock may be highly volatile and may be subject to wide fluctuations in response to various factors, some of which are beyond our control.

These factors include those discussed in this "Risk Factors" section of this report and others such as:

- results from, and any delays in, commencing, conducting or completing our clinical studies for our current drug candidates, or any other future clinical development programs;

- announcements by academic or other third parties challenging the fundamental premises underlying our approach to treating diseases of aging and/or drug development;

- announcements of regulatory approval or disapproval of our current or any future drug candidates;

- failure or discontinuation of any of our research and development programs;
- announcements relating to future licensing, collaboration, or development agreements;
- delays in the commercialization of our current or any future drug candidates;
- public misperception regarding the use of our therapies, or public bias of against “anti-aging” companies;
- acquisitions and sales of new products, technologies, or businesses;
- manufacturing and supply issues related to our drug candidates for clinical studies or future drug candidates for commercialization;
- quarterly variations in our results of operations or those of our future competitors;
- changes in earnings estimates or recommendations by securities analysts;
- announcements by us or our competitors of new products, significant contracts, commercial relationships, acquisitions, or capital commitments;
- developments with respect to intellectual property rights;
- our commencement of, or involvement in, litigation;
- changes in financial estimates or guidance, including our ability to meet our future revenue and operating profit or loss estimates or guidance;
- any major changes in our board of directors or management;
- new legislation in the United States relating to the sale or pricing of pharmaceuticals;
- FDA or other U.S. or foreign regulatory actions affecting us or our industry;
- product liability claims or other litigation or public concern about the safety of our drug candidates;
- market conditions in the pharmaceutical, biopharmaceutical and biotechnology sectors; and
- general economic conditions in the United States and abroad.

In addition, the stock markets in general, and the markets for pharmaceutical, biopharmaceutical, and biotechnology stocks in particular, have experienced extreme volatility as a result of the COVID-19 pandemic that may be unrelated to the operating performance of the issuer. These broad market fluctuations may adversely affect the trading price or liquidity of our common stock. In the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the issuer. If any of our stockholders were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our management would be diverted from the operation of our business.

An active, liquid and orderly market for our common stock may not develop and may not be maintained.

Prior to our initial public offering in May 2018, there was no public market for shares of our common stock. Although our common stock is listed on the Nasdaq Global Select Market, an active trading market for our common stock may never be sustained on the Nasdaq Global Select or any other exchange in the future. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider
reasonable. An inactive market may also impair our ability to raise capital by selling shares and may impair our ability to acquire other businesses, applications, or technologies using our shares as consideration.

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

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. In the event any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our clinical studies and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

We are an "emerging growth company" and as a result of the reduced disclosure and governance requirements applicable to emerging growth companies, our common stock may be less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. In addition, as an "emerging growth company" the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. We have elected to use this extended transition period under the JOBS Act. As a result, our financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make comparison of our financials to those of other public companies more difficult.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. Even after we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting company" which may allow us to take advantage of many of the same exemptions from disclosure requirements including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act. We will remain an emerging growth company until the earlier of (1) the last day of the year following the fifth anniversary of the consummation of our IPO, (2) the last day
of the year in which we have total annual gross revenue of at least $1.07 billion, (3) the last day of the year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded $700.0 million as of the last business day of the second fiscal quarter of such year or (4) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period.

If we sell shares of our common stock in future financings, stockholders may experience immediate dilution and, as a result, our stock price may decline.

We may from time to time issue additional shares of common stock at a discount from the current trading price of our common stock. As a result, our stockholders would experience immediate dilution upon the purchase of any shares of our common stock sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or common stock. For example, on June 3, 2019, we filed a Registration Statement on Form S-3, covering the offering of up to $250.0 million of shares of common stock, preferred stock, debt securities, warrants and units, and entered into a sales agreement, or the June 2019 Sales Agreement, with Cowen and Company, LLC, or Cowen, to sell shares of our common stock, from time to time, with aggregate gross sales proceeds of up to $75.0 million, through an
at-the-market equity offering program, or ATM Offering Program, under which Cowen acts as our sales agent. On July 31, 2020, we entered into the July 2020 Sales Agreement with Cowen to sell shares of our common stock, from time to time, with aggregate gross sales proceeds of up to $50.0 million, through an additional at-the-market equity offering program, or our Additional ATM Offering Program, under which Cowen acts as our sales agent. As of

December 31, 2019, we had sold 3,974,908 shares of common stock under the June 2019 Sales Agreement for total net proceeds of $26.1 million. If we issue common stock or securities convertible into common stock, our common stockholders would experience additional dilution and, as a result, our stock price may decline. During the year ended December 31, 2020, we issued and sold 5,002,257 shares of our common stock through our ATM Offering Program and received net proceeds of approximately $37.3 million, after deducting commissions and other offering expenses of $1.3 million. There have been no shares sold under our Additional ATM Offering Program as of December 31, 2020.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval

As of December 31, 2020, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially owned approximately 48.4% of our voting stock. Therefore, these stockholders have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. Moreover, holders of approximately 10.3 million shares of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We have registered and intend to continue to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates.

We incur increased costs as a result of operating as a public company, and our management devote substantial time to new compliance initiatives. We may fail to comply with the rules that apply to public companies, including Section 404 of the Sarbanes-Oxley Act of 2002, which could result in sanctions or other penalties that would harm our business.

We have incurred and will continue to incur significant legal, accounting and other expenses as a public company, including costs resulting from public company reporting obligations under the Exchange Act and regulations regarding corporate governance practices. The listing requirements of the Nasdaq Global Select Market and the rules of the Securities and Exchange Commission, or SEC, require that we satisfy certain corporate governance requirements relating to director independence, filing annual and interim reports, stockholder meetings, approvals and voting, soliciting proxies, conflicts of interest and a code of conduct. Our management and other personnel have devoted and will need to devote a substantial amount of time to ensure that we comply with all of these requirements. Moreover, the reporting requirements, rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costlier. Any changes we make to comply with these obligations may not be sufficient to allow us to satisfy our obligations as a public company on a timely basis, or at all. These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or board committees or to serve as executive officers, or to obtain certain types of insurance, including directors' and officers' insurance, on acceptable terms.

We are subject to Section 404 of The Sarbanes-Oxley Act of 2002, or Section 404, and the related rules of the SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. Section 404 requires an annual management assessment of the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of certain exemptions from

various reporting requirements that are applicable to public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of
the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal controls over financial reporting.

During the course of our review of our internal controls we may identify deficiencies in our internal controls that we must remediate. If we identify a material weakness in our internal controls over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. We or our independent registered public accounting firm may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting, which could harm our operating results, cause investors to lose confidence in our reported financial information and cause the trading price of our stock to fall. In addition, as a public company we will be required to file accurate and timely quarterly and annual reports with the SEC under the Exchange Act. In order to report our results of operations and financial statements on an accurate and timely basis, we will depend
in part on CROs to provide timely and accurate notice of their costs to us. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from The Nasdaq Global Select Market or other adverse consequences that would materially harm to our business.

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

We have incurred substantial losses during our history and may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset a portion of future taxable income, if any, until such unused losses expire, if ever. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three-year period, the corporation’s ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research and development tax credits) to offset its post- change income or taxes may be limited. We may have experienced ownership changes in the past and may experience ownership changes in the future as a result of subsequent shifts in our stock ownership (some of which shifts are outside our control). As a result, if we earn net taxable income, our ability to use our pre-change NOLs to offset such taxable income could be subject to limitations. Similar provisions of state tax law may also apply. As a result, even if we achieve profitability, we may be unable to use a material portion of our NOLs and other tax attributes.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent changes in control or changes in our management without the consent of our board of directors. These provisions include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror;
- the ability of our board of directors to alter our amended and restated bylaws without obtaining stockholder approval;

- the required approval of at least 66 2/3% of the shares entitled to vote at an election of directors to adopt, amend or repeal our amended and restated bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;

- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;

- the requirement that a special meeting of stockholders may be called only by the chief executive officer or the president or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and

- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if 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 registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.

- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.

- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification. We will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification.

- The rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.

- We may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

We do not currently intend to pay dividends on our common stock, and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We do not currently intend to pay any cash dividends on our common stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future. Since we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market value of our common stock. There is no guarantee that our common stock will appreciate or even maintain the price at which our holders have purchased it.

General Risk Factors

We or the third parties upon whom we depend may be adversely affected by earthquakes, other natural disasters or unforeseen pandemics and public health emergencies, such as the COVID-19 pandemic, and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our corporate headquarters and other facilities are located in the San Francisco Bay Area, which in the past has experienced both severe earthquakes and wildfires. Although we carry earthquake insurance, it is limited in scope. Earthquakes, wildfires or other natural disasters could severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects.

If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as our enterprise financial systems or manufacturing resource planning and enterprise quality systems, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The disaster recovery and
business continuity plans we have in place currently are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, particularly when taken together with our lack of earthquake insurance, could have a material adverse effect on our business. Measures taken in response to a pandemic, such as the COVID-19 pandemic, which causes a public health emergency, could also disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects. For example, in mid-March 2020, in alignment with federal, state and local guidance designed to slow the spread of COVID-19, we transitioned to a reduced onsite staffing model and remote work plan for all employees who cannot perform their work from home, such as our laboratory, operations, and facilities staff. As the COVID-19 pandemic evolves, we may be required to take additional actions that could impact our operations if required by applicable laws or regulations or if we determine to be in the best interests of our employees.

Furthermore, integral parties in our supply chain are similarly vulnerable to natural disasters or other sudden, unforeseen and severe adverse events. If such an event were to affect our supply chain, it could have a material adverse effect on our business.

Significant disruptions of information technology systems or breaches of data security could materially adversely affect our business, results of operations and financial condition.

We collect and maintain information in digital form that is necessary to conduct our business, and we are increasingly dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, store and transmit large amounts of confidential information, including intellectual property, proprietary business information and personal information. It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We have established physical, electronic and organizational measures to safeguard and secure our systems to prevent a data compromise, and rely on commercially available systems, software, tools, and monitoring to provide security for our information technology systems and the processing, transmission and storage of digital information. We have also outsourced elements of our information technology infrastructure, and as a result a number of third-party vendors may or could have access to our confidential information. Our internal information technology systems and infrastructure, and those of our current and any future collaborators, contractors and consultants and other third parties on which we

rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyberattacks or cyber-intrusions over the Internet, attachments to emails, persons inside our organization, or persons with access to systems inside our organization.

The risk of a security breach or disruption, particularly through cyberattacks or cyber-intrusion, including by computer hackers, "phishing" attacks, foreign governments and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. In addition, the prevalent use of mobile devices that access confidential information increases the risk of data security breaches, which could lead to the loss of confidential information or other intellectual property. As a result of COVID-19, we may face increased cybersecurity risks due to our reliance on internet technology and the number of our employees that are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities. The costs to us to mitigate network security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and while we have implemented security measures to protect our data security and information technology systems, our efforts to address these problems may not be successful, and these problems could result in unexpected interruptions, delays, cessation of service and other harm to our business and our competitive position. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, the loss of clinical study data from completed or ongoing or planned clinical studies could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data.

Moreover, if a computer security breach affects our systems, or those of our current and any future collaborators, contractors and consultants and other third parties on which we rely, or results in the unauthorized release of personally identifiable information, our reputation could be materially damaged. In addition, such a breach may require notification to governmental agencies, the media or individuals pursuant to various federal and state privacy and security laws, if applicable, including the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, and its implementing rules and regulations, as well as regulations promulgated by the Federal Trade Commission and state breach notification laws. We would also be exposed to a risk of loss or litigation and potential liability, which could materially adversely affect our business, results of operations and financial condition.

Our employees and independent contractors, including principal investigators, consultants, commercial collaborators, service providers and other vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have an adverse effect on our results of operations.

We are exposed to the risk that our employees and independent contractors, including principal investigators, consultants, any future commercial collaborators, service providers and other vendors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or other unauthorized activities that violate the laws and regulations of the FDA and other similar regulatory bodies,
including those laws that require the reporting of true, complete and accurate information to such regulatory bodies; manufacturing standards; U.S. federal and state healthcare fraud and abuse, data privacy laws and other similar non-U.S. laws; or laws that require the true, complete and accurate reporting of financial information or data. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of
clinical studies, the creation of fraudulent data in our preclinical studies or clinical studies, or illegal misappropriation of product, 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 be in compliance with such laws or regulations. In addition, 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 and financial results, including, without limitation, the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid and other U.S. healthcare programs, individual imprisonment, other sanctions, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Our business involves the use of hazardous materials, and we and our third-party manufacturers and suppliers must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our research and development activities and our third-party manufacturers' and suppliers' activities involve the controlled storage, use and disposal of hazardous materials owned by us, including the components of our product and drug candidates and other hazardous compounds. We and any third-party manufacturers and suppliers we engage are subject to numerous federal, state and local environmental, health and safety laws, regulations and permitting requirements, including those governing laboratory procedures; the generation, handling, use, storage, treatment, and disposal of hazardous and regulated materials and wastes; the emission and discharge of hazardous materials into the ground, air and water; and employee health and safety. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also produce hazardous waste. In some cases, these hazardous materials and various wastes resulting from their use are stored at our and our manufacturers' facilities pending their use and disposal. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination, which could cause an interruption of our commercialization efforts, research and development efforts and business operations,
environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products.

Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. Under certain environmental laws, we could be held responsible for costs relating to any contamination at our current or past facilities and at third-party facilities. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance.

Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our research, product development and manufacturing efforts. In addition, we cannot entirely eliminate the risk of accidental injury or contamination from these materials or wastes. 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 carry specific biological or hazardous waste insurance coverage, and our property, casualty, and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical studies or regulatory approvals could be suspended, which could have a material adverse effect on our business, results of operations and financial condition.

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

We may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in our patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. 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 distraction to management and other employees.

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

Filing, prosecuting and defending patents on drug candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries 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 is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

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

Changes in and failures to comply with U.S. and foreign privacy and data protection laws, regulations and standards may adversely affect our business, operations and financial performance.

We are subject to or affected by numerous federal, state and foreign laws and regulations, as well as regulatory guidance, governing the collection, use, disclosure, retention, and security of personal information, such as information that we collect about patients and healthcare providers in connection with clinical trials in the United States and abroad. The global data protection landscape is rapidly evolving, and implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future. This evolution may create uncertainty in our business, affect our or any service providers', contractors' or future collaborators' ability to operate in certain jurisdictions or to collect, store, transfer use and share personal information, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future. Any failure or perceived failure by us or our collaborators, service providers and contractors to comply with federal, state or foreign laws or regulation, our internal policies and procedures or our contracts governing processing of personal information could result in negative publicity, diversion of management time and effort and proceedings against us by governmental entities or others. In many jurisdictions, enforcement actions and consequences for noncompliance are rising.

In the United States, HIPAA imposes privacy, security and breach reporting obligations with respect to individually identifiable health information upon "covered entities" (health plans, health care clearinghouses and certain health care providers), and their respective business associates, individuals or entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity.
HIPAA mandates the reporting of certain breaches of health information to HHS, affected individuals and if the breach is large enough, the media. Entities that are found to be in violation of HIPAA as the result of a breach of unsecured protected health information, a complaint about privacy practices or an audit by HHS, may be subject to significant civil, criminal and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance. Even when HIPAA does not apply, according to the Federal Trade Commission, or the FTC, violating consumers' privacy rights or failing to take appropriate steps to keep consumers' personal information secure may constitute unfair acts or practices in or affecting commerce in violation of Section 5(a) of the FTC Act. The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Individually identifiable health information is considered sensitive data that merits stronger safeguards.

In addition, certain state laws govern the privacy and security of personal information, including health-related information, in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure to comply with these laws, where applicable, can result in the imposition of significant civil and/or criminal penalties and private litigation. For example, California enacted the California Consumer Privacy Act, or the CCPA, on June 28, 2018, which went into effect on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA may increase our compliance costs and potential liability. Some observers have noted that the CCPA could mark the beginning of a trend toward more stringent privacy legislation in the United States, which could increase our potential liability and adversely affect our business. Further, the California Privacy Rights Act, or the CPRA, recently passed in California as well. The CPRA will impose additional data protection obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It will also create a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions will go into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required.

Our operations abroad may also be subject to increased scrutiny or attention from data protection authorities. Many countries in these regions have established or are in the process of establishing privacy and data security legal frameworks with which we, our collaborators, service providers, including our CRO, and contractors must comply. For example, the EU General Data Protection Regulation, or GDPR, went into effect in May 2018 and imposes
strict requirements for processing the personal information of subjects within the EEA, including clinical trial data. Further, applicable privacy laws and court decisions could impact our ability to transfer personal data internationally. Recent legal developments in Europe have created complexity and compliance uncertainty regarding certain transfers of personal data from the EEA. For example, on July 16, 2020, the Court of Justice of the European Union, or the CJEU invalidated the EU-U.S. Privacy Shield Framework, or the Privacy Shield, under which personal data could be transferred from the EEA to United States entities who had self-certified under the Privacy Shield scheme. As a result, the Privacy Shield is no longer a valid mechanism for transferring personal data from the EEA to the United States. Moreover, it is uncertain whether standard contractual clauses will also be invalidated by the European courts or legislature as a mechanism to comply with EU data protection requirements for data transfers. The GDPR has and will continue to increase compliance burdens on us, including by mandating potentially burdensome documentation requirements and granting certain rights to individuals to control how we collect, use, disclose, retain and process information about them. The processing of sensitive personal data, such as health data, may impose heightened compliance burdens under the GDPR and is a topic of active interest among foreign regulators.

In addition, the GDPR provides for more robust regulatory enforcement and fines of up to €20 million or 4% of the annual global revenue of the noncompliant company, whichever is greater. Further, beginning January 1, 2021, we may have to comply with the GDPR and the GDPR as incorporated into United Kingdom national law, the latter regime having the ability to separately fine up to the greater of £17.5 million or 4% of global turnover. The relationship between the United Kingdom and the EU in relation to certain aspects of data protection law remains unclear, for example around how data can lawfully be transferred between each jurisdiction, which exposes us to further compliance risk. As we expand into other foreign countries and jurisdictions, we may be subject to additional laws and regulations that may affect how we conduct business.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters are located in South San Francisco, California, where we currently lease approximately 62,000 square feet of office and laboratory space pursuant to a lease dated February 28, 2019. Substantially all our employees work at our corporate headquarters.

Item 3. Legal Proceedings.

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

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information for Common Stock

Our common stock has been listed on The Nasdaq Global Select Market under the symbol "UBX" since May 3, 2018. As of March 1, 2021, there were 63 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial owners of our common stock represented by these record holders.

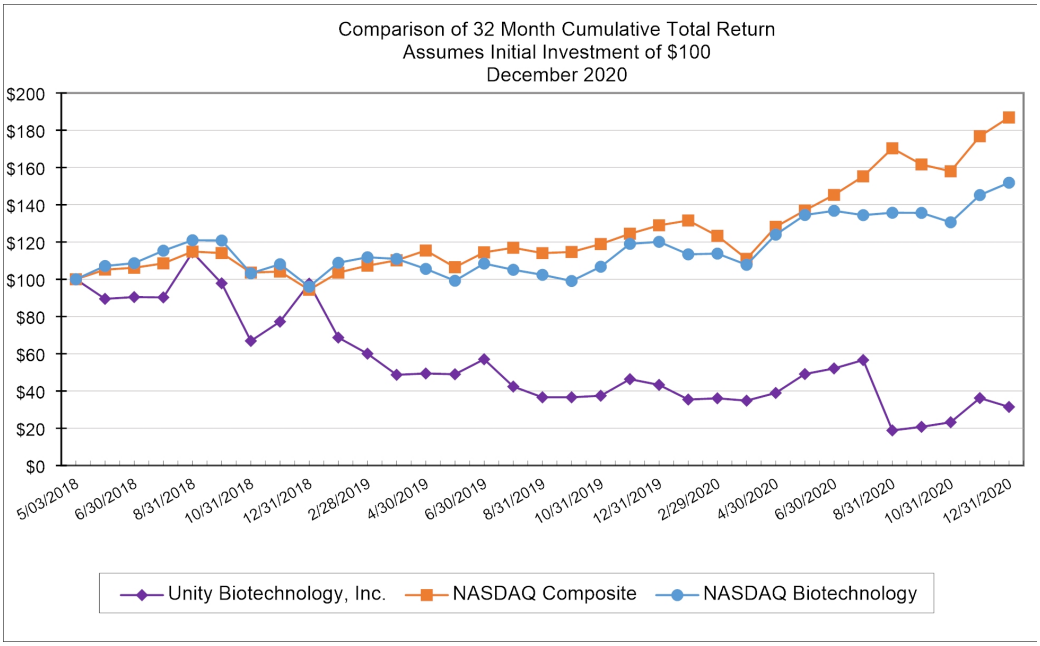
Dividend Policy

We have never declared or paid any cash dividends on our common stock or any other securities. We anticipate that we will retain all available funds and any future earnings, if any, for use in the operation of our business and do not anticipate paying cash dividends in the foreseeable future. In addition, future debt instruments may materially restrict our ability to pay dividends on our common stock. Payment of future cash dividends, if any, will be at the discretion of the board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

Performance Graph

This graph is not "soliciting material" or deemed "filed" with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to liabilities under that Section, and shall not be deemed incorporated by reference into any filing of Unity Biotechnology, Inc. under the Securities Act of 1933, as amended (the "Securities Act"), whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

The following graph compares the cumulative total return on our common stock relative to the cumulative total returns of the Nasdaq Composite Index and the Nasdaq Biotechnology Index. Pursuant to applicable Securities and Exchange Commission rules, all values assume reinvestment of the full amount of all dividends, however no dividends have been declared on our common stock to date. The stockholder returns shown on the graph below are based on historical results and are not necessarily indicative of future performance, and we do not make or endorse any predictions as to future stockholder returns.



Sales of Unregistered Securities

During the year ended December 31, 2020, we issued 361,644 shares of our common stock to Ascentage Pharma and an academic institution pursuant to the Commercial Agreements. The issuance of such was made in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended (the "Securities Act"), and Rule 506 promulgated thereunder, and Ascentage represented to us that it is an "accredited investor" within the meaning of Rule 501 under the Securities Act. Accordingly, the shares have not been registered under the Securities Act, and until so registered, these securities may not be offered or sold in the United States absent registration or availability of an applicable exemption from registration. No underwriting discounts or commissions or similar fees were payable in connection with the issuance.

Repurchase of Shares or of Company Equity Securities

None.

Item 6. Selected Financial Data.

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

We derived our selected statements of operations data for the years ended December 31, 2020, 2019 and 2018 and our balance sheet data as of December 31, 2020 and 2019 from our audited financial statements included elsewhere in this report. We derived our selected statements of operations data for the year ended December 31, 2017 and our balance sheet data as of December 31, 2018 and 2017 from our audited financial statements which are not included in this report. Our historical results are not necessarily indicative of the results that may be expected in any future period. The selected financial data below should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this report.

	Year Ended December 31,				
	2020	2019	2018	2017	2016
	(in thousands, except share and per share data)				
Statement of Operations Data:					
Contribution revenue	$ —	$ —	$ —	$ 1,382	$ —
Operating expenses:					
Research and development	67,309	70,957	58,907	37,373	13,707
General and administrative	24,025	20,046	16,016	9,617	5,137
Change in fair value of contingent consideration	(33)	(1,352)	4,542	—	—
Impairment of long-lived assets	2,629	—	—	—	—
Total operating expenses	93,930	89,651	79,465	46,990	18,844
Loss from operations	(93,930)	(89,651)	(79,465)	(45,608)	(18,844)
Loss on extinguishment of promissory notes	—	—	—	—	(9,377)
Interest income	1,196	3,289	3,312	1,055	—
Interest expense	(1,292)	—	—	—	(2,183)
Other income (expense), net	182	4,185	(245)	(103)	—
Net loss	$ (93,844)	$ (82,177)	$ (76,398)	$ (44,656)	$ (30,404)
Net loss per share, basic and diluted(1)	$ (1.84)	$ (1.88)	$ (2.70)	$ (13.97)	$ (11.42)
Weighted average number of shares used in computing net loss per share, basic and diluted(1)	50,864,889	43,624,807	28,269,907	3,197,516	2,662,841

(1) See Note 13 to our audited financial statements for an explanation of the calculations of our basic and diluted net loss per common share and the weighted-average number of common shares used in the computation of the per share amounts.

	As of December 31,				
	2020	2019	2018	2017	2016
	(in thousands)				
Balance Sheet Data:					
Cash and cash equivalents	$ 17,807	$ 37,473	$ 15,399	$ 7,298	$ 89,286
Marketable securities	97,763	87,533	155,736	84,330	—
Working capital	86,403	112,271	156,383	80,983	89,718
Total assets	156,319	151,221	181,375	102,024	96,648
Long-term debt, net	24,508	—	—	—	—
Convertible preferred stock	—	—	—	173,956	131,089
Accumulated deficit	(339,299)	(245,455)	(163,278)	(86,880)	(42,224)
Total stockholders' equity (deficit)	82,880	120,707	160,693	(83,113)	(41,536)

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with the section entitled "Selected Financial Data" and our audited financial statements and related notes included elsewhere in this report. This discussion and other parts of this report contain forward-looking statements that involve risks and uncertainties, such as our plans, objectives, expectations, intentions and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section entitled "Risk Factors" included elsewhere in this report.

Overview

We are a biotechnology company engaged in researching and developing therapeutics to slow, halt or reverse diseases of aging. Our initial focus is on creating senolytic medicines to selectively eliminate senescent cells and thereby treat diseases of aging, such as ophthalmologic and neurologic diseases.

In July 2020, we filed an Investigational New Drug application, or IND, to commence a Phase 1 study of UBX1325 in patients with diabetic macular edema, or DME, and age-related macular degeneration, or AMD. UBX1325 is a potent small molecule inhibitor of the anti-apoptotic Bcl-2 family member, Bcl-xL. We initiated a Phase 1 clinical study of UBX1325 and dosed the first patient in October 2020 and expect to obtain initial safety and tolerability results from this study in the first half of 2021. The overall clinical program is directed at multiple age-related diseases of the eye, including diabetic retinopathy and age-related macular degeneration, as well as DME. However, the impact of the COVID-19 pandemic on the timing of study enrollment, visit adherence and completions is hard to assess due to the rapidly evolving nature of the situation and it is possible that the study enrollment, visit adherence and completion may be delayed.

In August 2020, we announced the 12-week results from our Phase 2 study of UBX0101 in patients with moderate-to-severe painful osteoarthritis, or OA of the knee. There was no statistically significant difference between any arm of UBX0101 and placebo at the 12-week primary endpoint of the study. Given these results, we are not progressing UBX0101 into pivotal studies and will narrow our near-term focus to our ongoing ophthalmologic and neurologic disease programs.

In September 2020, we implemented a corporate restructuring to align our resources on cellular senescence programs in ophthalmology and neurology while further extending operating capital. The restructuring resulted in an elimination of approximately 33 positions, or approximately 32% of our workforce, as of September 30, 2020. We incurred a one-time employee benefits and severance charge of approximately $1.8 million in the year ended December 31, 2020. We expect these steps will extend our cash runway into the second half of 2022, and we project current cash and cash equivalents will fund key clinical data readouts for UBX1325.

Since the commencement of our operations, we have invested a significant portion of our efforts and financial resources in research and development activities, and we have incurred net losses each year since inception. Our net losses were $93.8 million and $82.2 million for the years ended December 31, 2020 and 2019, respectively. We do not have any products approved for sale, and we have never generated any revenue from contracts with customers. As of December 31, 2020, we had an accumulated deficit of $339.3 million, and we do not expect positive cash flows from operations in the foreseeable future. We expect to continue to incur net operating losses for at least the next several years as we continue our research and development efforts, advance our drug candidates through preclinical and clinical development, seek regulatory approval, prepare for and, if approved,
proceed to commercialization.

In August 2020 we entered into a Loan and Security Agreement, or the Loan Agreement, with Hercules Capital, Inc. and $25.0 million dollars was advanced to us upon execution of the Loan Agreement. The milestones for the remaining tranches have not yet been reached and, as of December 31, 2020 will not be reached as they were dependent, in whole or in part, upon the continued advancement in the clinical development of UBX0101 in patients with osteoarthritis of the knee. Starting in July 2021, we will be subject to a liquidity covenant requiring us to maintain a cash reserve of at least $15.0 million. We will make interest only payments through September 1, 2022,

or extended to March 1, 2023 upon satisfaction of certain milestones, and will then repay the principal balance and interest in equal monthly installments through August 1, 2024.

Prior to entering the Loan Agreement, we have historically funded our operations primarily from the issuance and sale of convertible preferred stock and convertible promissory notes, as well as public equity issuances. On June 3, 2019, we entered into a sales agreement or, the June 2019 Sales Agreement, with Cowen and Company, LLC, or Cowen, to sell shares of our common stock, from time to time, with aggregate gross sales proceeds of up to $75.0 million through an at-the-market equity offering program under which Cowen acts as sales agent, or the ATM Offering Program. During the year ended December 31, 2020, we issued and sold 5,002,257 shares of our common stock through our ATM Offering Program and received net proceeds of approximately $37.3 million, after deducting commissions and other offering expenses of $1.3 million. On July 31, 2020, we entered into a second sales agreement, or the July 2020 Sales Agreement, with Cowen to sell an additional $50.0 million of our shares of common stock through an additional at-the-market equity offering program, or the Additional ATM Offering Program in which Cowen will act as sales agent. As of December 31, 2020, there had been no shares sold under the Additional ATM Offering Program.

We do not expect to generate revenue from any drug candidates that we develop until we obtain regulatory approval for one or more of such drug candidates and commercialize our products or enter into collaborative agreements with third parties. Substantially all of our net losses have resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations. As a result, we will need to raise additional capital. Adequate funding may not be available to us on acceptable terms, or at all, particularly in light of the current COVID-19 pandemic and associated economic uncertainty and potential for local and/or global economic recession. If sufficient funds on acceptable terms are not available when needed, we could be required to significantly reduce our operating expenses and delay, reduce the scope of, or eliminate one or more of our development programs.

We rely on third parties in the conduct of our preclinical studies and clinical trials and for manufacturing and supply of our drug candidates. We have no internal manufacturing capabilities, and we will continue to rely on third parties, many of whom are single-source suppliers, for our preclinical and clinical trial materials, as well as the commercial supply of our products. In addition, we do not yet have a marketing or sales organization or commercial infrastructure. Accordingly, we will incur significant expenses to develop a marketing and sales organization and commercial infrastructure in advance of generating any product sales.

COVID-19 Update

The COVID-19 pandemic has placed strains on the providers of healthcare services, including the healthcare institutions, clinical research organizations, or CROs, and Institutional Review Boards under whose auspices we conduct our clinical trials. These strains have resulted in limits on the initiation of new clinical trials, slowing or halting enrollment in existing trials and restrictions placed upon on-site monitoring activities of clinical trials. Prior to the completion of our Phase 2 and Phase 1b UBX0101 clinical studies, we amended the clinical study protocols to enable remote data collection for clinical sites that were limited in their ability to conduct study visits in person, for either site or patient safety reasons. We also instituted remote data source verification procedures to limit the extent that on-site monitoring was required.

Although one of the manufacturers in our supply chain for UBX0101 experienced a two-week shutdown in April 2020 due to a COVID-19 related incident and there have been some delays in shipments due to a reduction in overall flights, neither of these factors impacted our supply of UBX0101 prior to our shutting down development of such program. There have been no other disruptions in our supply chain of drug manufacturers necessary to conduct our clinical trials and we believe we have sufficient supply of drug inventories to complete our Phase 1 study of UBX1325 in ophthalmologic disease.

Several of the CROs that provide preclinical services to us are based in China and India and experienced temporary shutdowns in February and March due to government mandates. In each case we were able to reassign the balance of activities to other CROs and the shutdowns did not impact our preclinical timelines. CROs based in the United States that provide preclinical services are experiencing heavy demand which may impact their ability to

start new studies and could lead to delays in the commencement of our preclinical studies. Several of our U.S.-based academic research partners have also experienced shutdowns which has slowed progress on several early stage projects, none of which impacted preclinical timelines.

In late February 2020, we created an internal, cross-functional COVID-19 Response Team to closely monitor the evolving situation and manage our response. In alignment with public health guidance designed to slow the spread of COVID-19, beginning in mid-March 2020, we implemented a reduced onsite staffing model and transitioned to a remote work plan for all employees other than those providing essential services. For our onsite employees, we have implemented heightened health and safety measures designed to comply with applicable federal, state and local guidelines in response to the COVID-19 pandemic. We are further supporting all of our employees by leveraging virtual meeting technology and encouraging employees to follow local health authority guidance. We may need to undertake additional actions that could impact our operations if required by applicable laws or regulations or if we determine to be in the best interests of our employees.

Components of Our Results of Operations

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for the development of our drug candidates, which include:

- personnel-related expenses, including salaries, benefits, severance and stock-based compensation for personnel contributing to research and development activities;
- laboratory expenses including supplies and services;
- clinical trial expenses;
- expenses incurred under agreements with third-party contract manufacturing organizations, contract research organizations, research and development service providers, academic research institutions, and consultants;
- expenses related to license and sponsored research agreements; and
- facilities and other allocated expenses, including expenses for rent and facilities maintenance, and depreciation and amortization.

We expect our research and development expenses to increase as we advance our drug candidates into and through preclinical and clinical trials and pursue regulatory approval of our drug candidates. The process of conducting the clinical trials required to obtain regulatory approval is costly and time-consuming. Clinical trials generally become larger and more costly to conduct as they advance into later stages and we are required to make estimates for expense accruals related to clinical trial expenses. The actual probability of success for our drug candidates may be affected by a variety of factors including: the safety and efficacy of our drug candidates, early clinical data, investment in our clinical program, the ability of collaborators, if any, to successfully develop any drug candidates we license to them, competition, manufacturing capability and commercial viability. We may never succeed in achieving regulatory approval for any of our drug candidates. Program costs that are direct external expenses are tracked on a program-by-program basis once they enter clinical studies. As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of our drug candidates.

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel costs, allocated facilities costs and other expenses for outside professional services, including legal, audit and accounting services, and depreciation and amortization expense related to property and equipment. Personnel costs consist of salaries, benefits, severance and stock-based compensation. We expect to continue to incur additional expenses associated with operating as a public

company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission and standards applicable to companies listed on a national securities exchange, additional insurance expenses, investor relations activities and other administrative and professional services.

Change Fair Value of Contingent Consideration

Certain of our license agreements include contingent consideration in the form of additional issuances of our common stock based on the achievement of certain milestones. For asset acquisitions, we assess whether such contingent consideration obligation meets the definition of a derivative and/or can be equity classified, until such time that the contingency or equity classification criteria is met or expires. We have recorded a liability related to contingent consideration as the net settlement criteria of the definition of a derivative had been met and equity classification criteria had not been met. The derivative related to this contingent consideration was measured at fair value as of each balance sheet date with the related change in fair value being reflected in operating results. Gains or losses on contingent consideration expense is driven by changes in the estimated fair value of the liability, which is determined using a probability-weighted valuation approach model that reflects the probability and timing of future issuances of our common shares.

Interest Income

Interest income is primarily related to interest earned on our marketable securities for the years ended December 31, 2020, 2019 and 2018.

Interest Expense

Interest expense relates to interest on the Loan Agreement entered into during the year ended December 31, 2020.

Other Income (Expense), Net

We held an equity investment in an entity called Ascentage Pharma Group International, or Ascentage International, an affiliate of a Hong Kong-based clinical-stage biopharmaceutical company called Ascentage Pharma Group Corp. Limited. In October 2019, Ascentage International completed an initial public offering of shares of its common stock on the Hong Kong Stock Exchange. Following the initial public offering, the underlying nature of our investment in Ascentage International changed and met the definition of an investment in an equity security with a readily determinable fair value to be measured at fair value on a recurring basis, based on quoted stock prices available on the Hong Kong Stock Exchange. During the year ended December 31, 2020, we sold our entire equity investment in Ascentage International. Other income (expense), net, includes the recognized gains and losses resulting from the sale of the investment in this equity security and the previous changes in fair value.

Results of Operations

Comparison of the Years Ended December 31, 2020 and 2019

The following table sets forth the significant components of our results of operations (in thousands):

	Year Ended December 31,		
	2020	2019	Change
Summary of Operations Data:			
Operating expenses:			
Research and development	$ 67,309	$ 70,957	$ (3,648)
General and administrative	24,025	20,046	3,979
Change in fair value of contingent consideration	(33)	(1,352)	1,319
Impairment of long-lived assets	2,629	—	2,629
Total operating expenses	93,930	89,651	4,279
Loss from operations	(93,930)	(89,651)	(4,279)
Interest income	1,196	3,289	(2,093)
Interest expense	(1,292)	—	(1,292)
Other income (expense), net	182	4,185	(4,003)
Net loss	$ (93,844)	$ (82,177)	$ (11,667)

Research and Development

Research and development expenses decreased by $3.6 million, to $67.3 million for the year ended December 31, 2020 from $71.0 million for the year ended December 31, 2019. The decrease was primarily due to a decrease of $5.3 million in direct research and development expenses mainly due to lower pre-clinical research and development activities and contract manufacturing costs, partially offset by higher costs from clinical programs started in late 2019. Laboratory supplies decreased by $1.9 million and facilities-related costs increased by $2.2 million. Personnel-related expenses increased by $1.4 million, of which $1.6 million was related to non-cash stock compensation expense partially offset by a decrease in payroll due to the corporate restructuring and other costs such as travel, due to employees working from home.

General and Administrative

General and administrative expenses increased by $4.0 million, to $24.0 million for the year ended December 31, 2020 from $20.0 million for the year ended December 31, 2019. The increase was primarily due to increases of $2.0 million in personnel-related expenses, of which $1.4 million was related to non-cash stock compensation expense, $0.8 million in professional fees, $0.7 million in facilities-related costs and $0.5 million in insurance-related expense.

Change in fair value of contingent consideration

Change in fair value of contingent consideration reflects a decrease in the contingent consideration liability of $1.3 million for the year ended December 31, 2020. We issued shares in 2020 as a result of meeting a contractual milestone. The change in the fair value of contingent consideration was primarily due to changes in assumptions, including probabilities, and our stock price used to calculate the fair value of the liability. Additionally, during the third quarter of 2020, we made changes to the related contracts, which resulted in there being no contingent consideration liability at December 31, 2020.

Impairment of Long-Lived Assets

Impairment charges consisted of impairment of long-lived assets. We evaluated the right-of-use asset and related leasehold improvements upon exit of our former headquarters located in Brisbane, California, and recorded an impairment charge of $2.6 million during the year.

Interest Income

Our interest income was $1.2 million for the year ended December 31, 2020, as compared to $3.3 million for the year ended December 31, 2019. The decrease is primarily attributable to lower market yields and cash balances on the Company's cash equivalents and marketable securities.

Interest Expense

Our interest expense of $1.3 million for the year ended December 31, 2020 is related to the Loan Agreement.

Other Income (Expense), Net

Other income was $0.2 million for the year ended December 31, 2020, as compared to $4.2 million for the year ended December 31, 2019. The decrease was primarily due to a change in the fair value of our investment in the common stock of Ascentage International.

Comparison of the years ended December 31, 2019 and 2018

The following table sets forth the significant components of our results of operations (in thousands):

	Year Ended December 31,		
	2019	2018	Change
Summary of Operations Data:			
Operating expenses:			
Research and development	$ 70,957	$ 58,907	$ 12,050
General and administrative	20,046	16,016	4,030
Change in fair value of contingent consideration	(1,352)	4,542	(5,894)
Total operating expenses	89,651	79,465	10,186
Loss from operations	(89,651)	(79,465)	(10,186)
Interest income	3,289	3,312	(23)
Other income (expense), net	4,185	(245)	4,430
Net loss	$ (82,177)	$ (76,398)	$ (5,779)

Research and Development

Research and development expenses increased by $12.1 million, to $71.0 million for the year ended December 31, 2019 from $58.9 million for the year ended December 31, 2018. The increase was primarily due to increases of $2.3 million for personnel-related expenses, which was partially offset by a decrease of $1.1 million related to non-cash stock compensation expense, $6.7 million for outside research and development activities and $3.1 million in lab and facilities-related costs.

General and Administrative

General and administrative expenses increased by $4.0 million, to $20.0 million for the year ended December 31, 2019 from $16.0 million for the year ended December 31, 2018. The increase was primarily due to increases of $3.4 million for personnel-related expenses, of which $2.5 million was related to non-cash stock compensation expense, and $0.6 million in insurance-related expense partially offset by $0.5 million decrease in professional fees.

Change in fair value of contingent consideration

Change in fair value of contingent consideration reflects a decrease in the contingent consideration liability of $1.4 million for the year ended December 31, 2019. The decrease in the fair value of contingent consideration was primarily due to changes in our stock price.

Interest Income

Our interest income was $3.3 million for the year ended December 31, 2019, as compared to $3.3 million for the year ended December 31, 2018.

Other Income (Expense), Net

Other income of $4.1 million for the year ended December 31, 2019 was primarily due to a change in the fair value of our investment in the common stock of Ascentage International. In October 2019, Ascentage International completed an initial public offering of shares of its common stock on the Hong Kong stock exchange which caused a change in our underlying investment resulting in it meeting the definition of an equity security with a readily determinable fair value. The increase in the fair value of our investment in Ascentage International was due to changes in the quoted stock price following the initial public offering.

Liquidity, Capital Resources and Capital Requirements

Sources of Liquidity

We have incurred net losses each year since inception. We do not have any products approved for sale and have never generated any revenue from product sales. Historically, we have incurred operating losses as a result of ongoing efforts to develop our drug candidates, including conducting ongoing research and development, preclinical studies and providing general and administrative support for these operations. As of December 31, 2020, we had an accumulated deficit of $339.3 million, and we do not expect positive cash flows from operations in the foreseeable future. We expect our operating losses and net cash used in operating activities will increase over at least the next several years as we continue our research and development activities, advance our drug candidates through preclinical and clinical testing and move into later and more costly stages of drug development, hire personnel and prepare for regulatory submissions and the commercialization of our drug candidates.

We have historically financed our operations primarily through private placements of preferred stock and promissory notes, as well as public equity issuances, such as our initial public offering or IPO and more recently through proceeds from our new Loan Agreement and the ATM Offering Program, and will continue to be dependent upon equity and/or debt financing until we are able to generate positive cash flows from our operations.

In August 2020, we entered into the Loan Agreement with Hercules Capital, Inc. pursuant to a term loan, subject to certain terms and conditions. $25.0 million dollars was advanced to us on the date of execution of the Loan Agreement. The milestones for the remaining tranches have not yet been reached and, as of December 31, 2020 will not be reached as they were dependent, in whole or in part, upon on the continued advancement in the clinical development of UBX0101 in patients with osteoarthritis of the knee. We will make interest only payments through September 1, 2022, or extended to March 1, 2023 upon satisfaction of certain milestones, and will then repay the principal balance and interest in equal monthly installments through August 1, 2024.

In June 2019, we filed a Registration Statement on Form S-3, or the Shelf Registration Statement, covering the offering of up to $250.0 million of common stock, preferred stock, debt securities, warrants and units. The Shelf Registration Statement included an initial prospectus covering the offering, issuance and sale of up to $75.0 million of our common stock from time to time through the ATM Offering Program. The SEC declared the Shelf Registration Statement effective in June 2019. In June 2019, we also entered into a sales agreement with Cowen or the June 2019 Sales Agreement, pursuant to which we may sell from time to time, at our option, up to $75.0 million

of our common stock through the ATM Offering Program under which Cowen acts as sales agent. During the year ended December 31, 2020, we issued and sold 5,002,257 shares of our common stock through our ATM Offering Program and received net proceeds of approximately $37.3 million, after deducting commissions and other offering expenses of $1.3 million. As of December 31, 2020, approximately $9.0 million of ATM Offering Program proceeds remained available to be sold under our ATM Offering Program.

In July 2020, we filed an additional prospectus supplement to the Shelf Registration Statement, covering the offering, issuance and sale of up to an additional $50.0 million of the Company's common stock from time to time through an additional at-the-market offering under the Securities Act of 1933, as amended, or the Additional ATM Offering Program. In July 2020, we entered into a second sales agreement with Cowen, or the July 2020 Sales Agreement, to sell an additional $50.0 million of our shares of common stock through the Additional ATM Offering Program in which Cowen acts as sales agent. As of December 31, 2020, there have been no shares sold under the Additional ATM Offering Program.

Future Funding Requirements

To date we have not generated any revenue from contracts with customers. We expect to continue to incur significant losses for the foreseeable future, and we expect the losses to increase as we continue the development of, and seek regulatory approvals for, our drug candidates, and begin to commercialize any approved products. We are subject to all of the risks typically related to the development of new drug candidates, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. Moreover, following the completion of our IPO, we began to incur additional ongoing costs associated with operating as a public company. We anticipate that we will need substantial additional funding in connection with our continuing operations.

Until we can generate a sufficient amount of revenue from the commercialization of our drug candidates or from collaborative agreements with third parties, if ever, we expect to finance our future cash needs through various means. Additional capital may be raised through the sale of our equity securities, incurring debt, entering into licensing or collaboration agreements with partners, receiving research contributions, grants or other sources of financing to fund our operations. There can be no assurance that sufficient funds will be available to us on attractive terms or at all. If we are unable to obtain additional funding from these or other sources, it may be necessary to significantly reduce our rate of spending through reductions in staff and delaying, scaling back, or stopping certain research and development programs. Insufficient liquidity may also require us to relinquish rights to drug candidates at an earlier stage of development or on less favorable terms than we would otherwise choose.

Since our inception, we have incurred significant losses and negative cash flows from operations. We have an accumulated deficit of $339.3 million through December 31, 2020. We expect to incur substantial additional losses in the future as we conduct and expand our research and development activities. We believe that our existing cash, cash equivalents and marketable securities will be sufficient to enable us to fund our projected operations through at least the next 12 months from the date of the issuance of our financial statements included in this Annual Report on Form 10-K.

Based on our current operating plans, we expect our existing capital resources will fund our planned operating expenses into the second half of 2022, which is expected to fund key clinical data readouts for UBX1325. We have based our projections of operating capital requirements on assumptions that may prove to be incorrect and we may use all our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with research, development and commercialization of biotechnology products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the scope, progress, results and costs of researching and developing our drug candidates, and conducting preclinical studies and clinical studies, including our ongoing Phase 1 safety and tolerability study of UBX1325, which we recently initiated, and our additional planned clinical studies in our ophthalmology program;

- the timing of, and the costs involved in, obtaining regulatory approvals for our lead drug candidates or any future drug candidates;
- potential delays in or cost increases associated with our ongoing or planned preclinical studies or clinical trials as a result of the COVID-19 pandemic;
- the number and characteristics of any additional drug candidates we develop or acquire;
- the timing and amount of any milestone payments we are required to make pursuant to our license agreements;
- the cost of manufacturing our lead drug candidates or any future drug candidates and any products we successfully commercialize;
- the cost of building a sales force in anticipation of product commercialization;
- the cost of commercialization activities if our lead drug candidates or any future drug candidates are approved for sale, including marketing, sales and distribution costs;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;
- any product liability or other lawsuits related to our products;
- the expenses needed to attract, hire and retain skilled personnel;
- the costs associated with being a public company;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our intellectual property portfolio; and
- the timing, receipt and amount of sales of any future approved or cleared products, if any.

Cash Flows

The following table sets forth a summary of the primary sources and uses of cash and restricted cash for each of the periods presented below (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Cash used in operating activities	$ (78,333)	$ (72,421)	$ (56,623)
Cash provided by (used in) investing activities	(5,208)	67,953	(72,206)
Cash provided by financing activities	63,875	27,438	136,930
Net increase (decrease) in cash and restricted cash	$ (19,666)	$ 22,970	$ 8,101

Operating Activities

Cash used in operating activities of $78.3 million for the year ended December 31, 2020 consisted primarily of a net loss of $93.8 million adjusted for net non-cash charges of $20.1 million and net changes to our operating assets and liabilities of $4.6 million. Our non-cash charges consisted primarily of $13.8 million in stock-based compensation, $3.4 million in depreciation and amortization, $2.6 million in impairment charges pertaining to leasehold improvements and right of use assets in the Company’s former offices, $1.2 million in common stock

granted to a third party, $0.3 million in amortization of debt issuance costs and $0.3 million in net accretion and amortization of premium and discounts on marketable securities, partially offset by a $1.1 million in non-cash rent expense and $0.5 million change in fair value of strategic investment. The net change in our operating assets and liabilities consisted of decreases of $2.6 million in accounts payable, $0.9 million in accrued liabilities and other current liabilities, $0.5 million in accrued compensation and increase of $1.2 million in prepaid expenses and other current assets, partially offset by a decrease of $0.6 million in other long-term assets.

Cash used in operating activities of $72.4 million for the year ended December 31, 2019 consisted primarily of a net loss of $82.2 million adjusted for net non-cash charges of $6.2 million and net changes to our operating assets and liabilities of $3.6 million. Our non-cash charges consisted primarily of $10.9 million in stock-based compensation, $2.7 million in depreciation and amortization and $1.0 million in common stock granted to a third party, partially offset by a $1.4 million change in fair value of contingent consideration, $1.3 million in accretion of our tenant improvement allowance and $1.2 million in net accretion and amortization of premium and discounts on marketable securities. The net change in our operating assets and liabilities consisted of increases of $2.5 million in deferred rent, net of current portion, and $2.1 million in accrued compensation, partially offset by a decreases of $0.6 million in accrued liabilities and other current liabilities, $0.2 million in accounts payable and a $0.2 million increase in prepaid expenses and other current assets.

Cash used in operating activities of $56.6 million for the year ended December 31, 2018 consisted primarily of a net loss of $76.4 million adjusted for net non-cash charges of $14.6 million and net changes to our operating assets and liabilities of $5.1 million. Our non-cash charges consisted primarily of $9.4 million in stock-based compensation, $4.5 million change in fair value of contingent consideration and $2.2 million in depreciation and amortization, partially offset by a $1.0 million in amortization of premium and discounts on marketable securities and $0.6 million in accretion of our tenant improvement allowance. The net change in our operating assets and liabilities consisted of a decrease of $1.4 million in contribution receivable, and increases of $2.2 million in accounts payable, $1.6 million in accrued compensation and $1.4 million in accrued liabilities and other current liabilities, partially offset by an increase of $0.6 million in other long-term assets and $0.8 million in prepaid expenses and other current assets.

Investing Activities

Cash used in investing activities of $5.2 million for the year ended December 31, 2020 was related to purchases of marketable securities of $138.5 million and purchases of property and equipment of $0.6 million, which were offset by maturities of marketable securities of $127.9 million and the sale of our strategic investment of $6.0 million.

Cash provided by investing activities of $68.0 million for the year ended December 31, 2019 was related to maturities of marketable securities of $188.8 million which were offset by purchases of marketable securities of $119.3 million and purchases of property and equipment of $1.6 million.

Cash used in investing activities of $72.2 million for the year ended December 31, 2018 was related to purchases of marketable securities of $204.1 million, purchases of property and equipment of $1.3 million and the purchase of an investment in stock of $0.5 million, which were offset by maturities of marketable securities of $133.6 million.

Financing Activities

Cash provided by financing activities of $63.9 million for the year ended December 31, 2020 was related to $37.3 million in proceeds from the sale of common stock through our ATM Offering Program, net of issuance costs, $24.2 million in proceeds from long-term debt, net of issuance costs, $1.5 million in proceeds from issuance of common stock upon exercise of stock options, net of repurchases, $0.6 million in proceeds from the issuance of common stock under the 2018 Employee Stock Purchase Plan, and $0.4 million in proceeds from the repayment of promissory notes from an employee.

Cash provided by financing activities of $27.4 million for the year ended December 31, 2019 was related to $26.1 million in proceeds from the sale of common stock through our ATM Offering Program, net of issuance costs, $0.8 million in proceeds from the issuance of common stock under the 2018 Employee Stock Purchase Plan and proceeds from issuance of common stock upon exercise of stock options, net of repurchases, of $0.6 million.

Cash provided by financing activities of $136.9 million for the year ended December 31, 2018 was primarily related to net proceeds from our sale of common stock in our IPO of $75.9 million, net proceeds from issuance of Series C convertible preferred stock of $59.9 million, proceeds from repayment of recourse notes of $0.9 million, and proceeds from issuance of common stock upon exercise of stock options, net of repurchases of $0.4 million.

Contractual Obligations and Other Commitments

Our contractual obligations and commitments relate primarily to our Loan Agreement, operating leases and non-cancelable purchase obligations under agreements with various research and development organizations and suppliers in the ordinary course of business. In February 2019, we entered into a lease agreement for new office and laboratory space in South San Francisco, California. See Note 7, “Commitments and Contingencies” and Note 8, “Term Loan Facility,” to our financial statements for further information.

We are party to various license agreements pursuant to which we have in-licensed rights to various technologies, including patents, research “know-how” and proprietary research tools, for the discovery, research, development and commercialization of drug candidates to treat age-related diseases. The license agreements obligate us to make certain milestone payments related to specified clinical development and sales milestone events, as well as tiered royalties in the low-single digits based on sales of licensed products. See Note 5 to our financial statements “License Agreements” for additional information.

Indemnification

In the normal course of business, we enter into contracts and agreements that contain a variety of representations and warranties and provide for general indemnifications. Our exposure under these agreements is unknown because it involves claims that may be made against us in the future but have not yet been made. To date, we have not paid any claims or been required to defend any action related to our indemnification obligations. However, we may record charges in the future as a result of these indemnification obligations.

In accordance with our certificate of incorporation and bylaws, we have potential indemnification obligations to our officers and directors for specified events or occurrences, subject to some limits, while they are serving at our request in such capacities. There have been no claims to date, and we have director and officer insurance that may enable us to recover a portion of any amounts paid for future potential claims.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements.

Critical Accounting Policies and Estimates

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

While our significant accounting policies are described in more detail in the notes to our financial statements included elsewhere in this prospectus, we believe that the following accounting policies are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Research and Development Expenses and Accruals

Costs related to research and development of drug candidates are charged to research and development expense as incurred. Research and development costs include, but are not limited to, payroll and personnel expenses for personnel contributing to research and development activities, laboratory supplies, outside services, licenses acquired to be used in research and development, manufacturing of clinical material, pre-clinical testing and consultants and allocated overhead, including rent, equipment, depreciation and utilities. Research and development costs are expensed as incurred unless there is an alternative future use in other research and development projects. Payments made prior to the receipt of goods or services to be used in research and development are deferred and recognized as expense in the period in which the related goods are received or services are rendered. Such payments are evaluated for current or long-term classification based on when they will be realized.

As part of the process of preparing our financial statements, we are required to estimate expenses resulting from our obligations under contracts with vendors and consultants and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary from contract to contract and may result in payment flows that do not match the periods over which materials or services are provided under such contracts. Our objective is to reflect the appropriate expenses in our financial statements by matching those expenses with the period in which services and efforts are expended. We account for these expenses according to the progress of the production of clinical trial materials or based on progression of the clinical trial, as measured by patient progression and the timing of various aspects of the trial. We determine accrual estimates by taking into account discussion with applicable personnel and outside service providers as to the progress or state of consummation of goods and services, or the services completed. During the course of a clinical trial, we adjust the rate of expense recognition if actual results differ from our estimates. We make estimates of accrued expenses as of each balance sheet date in our financial statements based on the facts and circumstances known at that time. Our clinical trial accrual is dependent in part upon the timely and accurate reporting of contract research organizations, contract manufacturers and other third-party vendors. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in our reporting changes in estimates in any particular period. Adjustments to prior period estimates have not been material for the years ended December 31, 2020 and 2019.

We have and may continue to enter into license agreements to access and utilize certain technology. We evaluate if the license agreement is an acquisition of an asset or a business. To date none of our license agreements have been considered to be an acquisition of a business. For asset acquisitions, the upfront payments to acquire such licenses, as well as any future milestone payments made before product approval, are immediately recognized as research and development expense when due, provided there is no alternative future use of the rights in other research and development projects. These license agreements may also include contingent consideration in the form of cash and additional issuances of our common stock.

Contingent Consideration Liability

We have entered into license agreements to access and utilize certain intellectual property and technology and may enter into additional license agreements in the future. In each case, we evaluate if the license agreement results in the acquisition of an asset or a business. To date, none of our license agreements have been considered an acquisition of a business. If a license agreement is deemed to constitute an asset acquisition, the upfront payments to acquire such licenses, as well as any future milestone payments made before product approval, are immediately recognized as research and development expense when due, provided there is no alternative future use of the rights in other research and development projects. Several of our license agreements also include contingent consideration in the form of an obligation to issue additional shares of our common stock if we achieve certain milestones. For contingent consideration related to our asset acquisitions, we assess on a continuous basis whether the contingent consideration meets the definition of a derivative and/or whether it can be classified within stockholders' equity, until such time that equity classification criteria are met or the milestones expire. The derivative related to the

contingent consideration arising from our license agreements is measured at fair value as of each balance sheet date with the related change in fair value being reflected in operating expenses. Upon a reassessment event that results in the contingent consideration no longer meeting the definition of a derivative and/or meeting equity classification criteria, the final change in fair value of the instrument is recorded within operating expenses and the liability is reclassified into stockholders' equity.

Stock-Based Compensation

We recognize compensation costs related to stock-based awards granted based on the estimated fair value of the awards on the date of grant, and we recognize forfeitures as they occur. For awards that vest solely based on service conditions or a combination of service and performance conditions, we estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. The grant date fair value of the awards is generally recognized on a straight-line basis over the requisite service period, which is typically their vesting period. We recognize forfeitures as they occur.

Prior to our IPO, the fair value of our shares of common stock underlying the stock options was the responsibility of and determined by our Board. Because there was no public market for our common stock, the Board determined the fair value of common stock at the time of grant of the option by considering a number of objective and subjective factors, including, among others: the prices at which we sold shares of our convertible preferred stock to outside investors in arms-length transactions; the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock; our results of operations, financial position and capital resources; current business conditions and projections; the lack of marketability of our common stock; the hiring of key personnel and the experience of management; progress of our research and development activities; our stage of development and material risks related to its business; the fact that the stock option grants involve illiquid securities in a private company; and the likelihood of achieving a liquidity event, such as an initial public offering or sale, in light of prevailing market conditions.

Following the IPO, the market traded price of the shares of common stock underlying the stock-based awards is the fair value of our stock as reported on The Nasdaq Global Select Market on the grant date.

The Black-Scholes option-pricing model requires the use of highly subjective assumptions to determine the fair value of stock-based awards. These assumptions include:

- Expected term—The expected term represents the period that the stock-based awards are expected to be outstanding. We use, due to insufficient historical data, the simplified method to determine the expected term, which is based on the average of the time-to-vesting and the contractual life of the options.
- Expected volatility—Due to our limited trading history for our common stock, the expected volatility is estimated based on the average historical volatilities of common stock of comparable publicly traded entities over a period equal to the expected term of the stock option grants. The comparable companies are chosen based on their size, stage in the product development cycle or area of specialty. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- Risk-free interest rate—The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the expected term of the awards.
- Expected dividend—We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

We have also granted stock options to certain key employees that vest in conjunction with certain performance and market conditions. We estimate the fair value of these awards using a lattice model, taking into consideration the market conditions. No expense will be recorded related to these awards until the achievement of the performance condition becomes probable. Once the achievement of the performance condition becomes probable, expense related to these awards is recognized using the accelerated attribution method with a cumulative

catch-up adjustment over the derived service period relating to the market conditions, if the market conditions have not been met. As these awards vest in their entirety upon achievement of the market conditions, any unrecognized expense would be accelerated if the market conditions are achieved prior to the completion of the derived service period. The Company has also used the Monte-Carlo option-pricing model to estimate the fair value of stock option awards that contain only market conditions. The Monte-Carlo option pricing model uses similar input assumptions as the Black-Scholes model; however, it further incorporates into the fair-value determination the possibility that the market condition may not be satisfied.

As of December 31, 2020, we had $25.1 million of unrecognized compensation expense related to unvested stock options and restricted stock units, which is expected to be recognized over an estimated weighted-average period of 3.25 years. For stock-based awards subject to ratable vesting, we recognize compensation cost on a straight-line basis over the service period for the entire award. In future periods, our stock-based compensation expense is expected to increase as a result of recognizing our existing unrecognized stock-based compensation for awards that will vest and as we issue additional stock-based awards to attract and retain our employees.

JOBS Act Accounting Election

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have irrevocably elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. We also rely on other exemptions provided by the JOBS Act, including, without limitation, providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. We will remain an emerging growth company until the earlier of (1) the last day of the year following the fifth anniversary of the consummation of our IPO, (2) the last day of the year in which we have total annual gross revenue of at least $1.07 billion, (3) the last day of the year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded $700.0 million as of the last business day of the second fiscal quarter of such year or (4) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period. Even after we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting company" which may allow us to take advantage of many of the same exemptions from disclosure requirements including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act.

Recent Accounting Pronouncements

See Note 2 to our Financial Statements "Summary of Significant Accounting Policies" for information.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Cash, Cash Equivalents and Marketable Securities

We are exposed to market risks in the ordinary course of our business. These risks primarily relate to interest rate sensitivities. We had cash, cash equivalents and marketable securities of $115.6 million as of December 31, 2020, which consist of bank deposits, money market funds, and marketable securities. The primary objective of our investment activities is to preserve capital to fund our operations. We also seek to maximize income from our investments without assuming significant risk. Because our investments are primarily short-term in duration, we believe that our exposure to interest rate risk is not significant, and a 1% movement in market interest rates would not have a significant impact on the total value of our portfolio.

Interest Rate Risk

As of December 31, 2020, the outstanding principal amount of the term loan under the Hercules Loan Agreement was $25.0 million. The interest payments under our term loan may be subject to interest rate risk and our interest expense could increase if market interest rates increase. The interest on the term loan accrues at a per annum rate of the greater of (i) the Wall Street Journal prime rate plus 6.10% and (ii) 9.35%. Accordingly, increases in these published rates would increase our interest payments under the term loans. The effective interest rate at December 31, 2020 was 12.40%. A hypothetical 1% change in interest rates would increase expense by approximately $0.2 million annually and would not have a material impact on our results of operations.

Item 8. Financial Statements and Supplementary Data.

UNITY BIOTECHNOLOGY, INC.
Index to Financial Statements

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of
Unity Biotechnology, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Unity Biotechnology, Inc. ("the Company") as of December 31, 2020 and 2019, and related statements of operations and comprehensive loss, convertible preferred stock and stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

Adoption of New Accounting Standard

As discussed in Note 2 to the financial statements, the Company changed its method of accounting for leases in 2020 due to the adoption of Accounting Standard Updated ("ASU") No. 2016-02, *Leases* (Topic 842), effective January 1, 2020, using the modified retrospective approach.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2017.

Redwood City, California
March 23, 2021

UNITY BIOTECHNOLOGY, INC.
Balance Sheets
(in thousands, except for share amounts and par value)

	December 31,	
	2020	2019
Assets		
Current assets:		
Cash and cash equivalents	$ 17,807	$ 37,473
Short-term marketable securities	79,892	84,508
Strategic investment	—	5,507
Prepaid expenses and other current assets	3,167	1,999
Total current assets	100,866	129,487
Property and equipment, net	12,627	16,636
Operating lease right-of-use assets	23,509	—
Long-term marketable securities	17,871	3,025
Restricted cash	1,446	1,446
Other long-term assets	—	627
Total assets	$ 156,319	$ 151,221
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,558	$ 5,185
Accrued compensation	5,355	5,905
Accrued and other current liabilities	6,550	4,995
Contingent consideration liability	—	1,131
Total current liabilities	14,463	17,216
Operating lease liability, net of current portion	34,468	—
Deferred rent, net of current portion	—	13,298
Long-term debt, net	24,508	—
Total liabilities	73,439	30,514
Commitments and contingencies (Note 7)		
Convertible preferred stock, $0.0001 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Stockholders' equity:		
Common stock, $0.0001 par value; 300,000,000 shares authorized as of December 31, 2020 and 2019; 53,253,213 and 47,227,065 shares issued and outstanding as of December 31, 2020 and 2019, respectively	5	5
Additional paid-in capital	422,379	366,695
Related party promissory notes for purchase of common stock	(210)	(210)
Employee promissory notes for purchase of common stock	—	(418)
Accumulated other comprehensive gain	5	90
Accumulated deficit	(339,299)	(245,455)
Total stockholders' equity	82,880	120,707
Total liabilities and stockholders' equity	$ 156,319	$ 151,221

See accompanying notes to the financial statements.

UNITY BIOTECHNOLOGY, INC.
Statements of Operations and Comprehensive Loss
(in thousands, except share and per share amounts)

	Year ended December 31,		
	2020	2019	2018
Operating expenses:			
Research and development	$ 67,309	$ 70,957	$ 58,907
General and administrative	24,025	20,046	16,016
Change in fair value of contingent consideration	(33)	(1,352)	4,542
Impairment of long-lived assets	2,629	—	—
Total operating expenses	93,930	89,651	79,465
Loss from operations	(93,930)	(89,651)	(79,465)
Interest income	1,196	3,289	3,312
Interest expense	(1,292)	—	—
Other income (expense), net	182	4,185	(245)
Net loss	$ (93,844)	$ (82,177)	$ (76,398)
Other comprehensive loss			
Unrealized gain (loss) on marketable debt securities	(85)	185	9
Comprehensive loss	$ (93,929)	$ (81,992)	$ (76,389)
Net loss per share, basic and diluted	$ (1.84)	$ (1.88)	$ (2.70)
Weighted average number of shares used in computing net loss per share, basic and diluted	50,864,889	43,624,807	28,269,907

See accompanying notes to the financial statements.

UNITY BIOTECHNOLOGY, INC.
Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)
(in thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Related Party Promissory Notes for Purchase of Common Stock	Employee Promissory Notes for Purchase of Common Stock	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount						
Balances at December 31, 2017	**28,159,724**	**$ 173,956**	**4,830,389**	**$ 1**	**$ 4,072**	**$ (202)**	**$ —**	**$ (104)**	**$ (86,880)**	**$ (83,113)**
Issuance of Series C convertible preferred stock at $15.3317 per share for cash, net of issuance costs of $119	3,913,425	59,881	—	—	—	—	—	—	—	—
Issuance of common stock upon initial public offering, net of issuance costs of $9,149	—	—	5,000,000	1	75,851	—	—	—	—	75,852
Conversion of Series A-1, A-2, B and C convertible preferred stock to common stock	(32,073,149)	(233,837)	32,073,149	2	233,837	—	—	—	—	233,839
Issuance of common stock upon exercise of warrants and stock options, net of amount related to early exercised options of $1,212	—	—	510,756	—	374	—	—	—	—	374
Vesting of early exercised stock options	—	—	—	—	584	—	—	—	—	584
Stock-based compensation	—	—	—	—	9,441	—	—	—	—	9,441
Unrealized gain on available-for-sale marketable securities	—	—	—	—	—	—	—	9	—	9
Receipt of promissory note from related party for purchase of common stock	—	—	—	—	—	(390)	—	—	—	(390)
Receipt of promissory note from employee for purchase of common stock	—	—	—	—	—	—	(400)	—	—	(400)
Repayment of promissory note from related party	—	—	—	—	504	391	—	—	—	895
Net loss	—	—	—	—	—	—	—	—	(76,398)	(76,398)
Balances at December 31, 2018	**—**	**$ —**	**42,414,294**	**$ 4**	**$ 324,663**	**$ (201)**	**$ (400)**	**$ (95)**	**$ (163,278)**	**$ 160,693**
Issuance of common stock, net of issuance costs, under at-the-market ("ATM") equity offering program	—	—	3,974,908	1	26,085	—	—	—	—	26,086
Issuance of common stock upon exercise of stock options	—	—	505,226	—	840	—	—	—	—	840
Vesting of early exercised stock options	—	—	—	—	647	—	—	—	—	647
Stock-based compensation	—	—	—	—	10,852	—	—	—	—	10,852
Common stock issued to third parties	—	—	253,334	—	3,022	(9)	(18)	—	—	2,995
Repurchased shares	—	—	(4,281)	—	—	—	—	—	—	—
Issuance of common stock under employee stock purchase plan ("2018 ESPP")	—	—	83,584	—	586	—	—	—	—	586
Unrealized gain on available-for-sale marketable securities	—	—	—	—	—	—	—	185	—	185
Net loss	—	—	—	—	—	—	—	—	(82,177)	(82,177)
Balances at December 31, 2019	**—**	**$ —**	**47,227,065**	**$ 5**	**$ 366,695**	**$ (210)**	**$ (418)**	**$ 90**	**$ (245,455)**	**$ 120,707**
Issuance of common stock, net of issuance costs, under ATM equity offering program	—	—	5,002,257	—	37,270	—	—	—	—	37,270
Issuance of common stock upon exercise of stock options	—	—	410,484	—	1,510	—	—	—	—	1,510
Issuance of common stock upon vesting of restricted stock units	—	—	103,020	—	—	—	—	—	—	—
Vesting of early exercised stock options	—	—	—	—	216	—	—	—	—	216
Stock-based compensation	—	—	—	—	13,746	—	—	—	—	13,746
Common stock issued for services	—	—	43,550	—	100	—	—	—	—	100
Common stock issued to third parties for milestone payments	—	—	361,644	—	2,310	—	—	—	—	2,310
Repayment of promissory note from employee from purchase of common stock	—	—	—	—	—	—	374	—	—	374
Repayment of promissory note from employee through repurchase of early exercise shares	—	—	(12,909)	—	(44)	—	44	—	—	—
Issuance of common stock under 2018 ESPP	—	—	118,102	—	576	—	—	—	—	576
Unrealized loss on available-for-sale marketable securities	—	—	—	—	—	—	—	(85)	—	(85)
Net loss	—	—	—	—	—	—	—	—	(93,844)	(93,844)
Balances at December 31, 2020	**—**	**$ —**	**53,253,213**	**$ 5**	**$ 422,379**	**$ (210)**	**$ —**	**$ 5**	**$ (339,299)**	**$ 82,880**

See accompanying notes to the financial statements

UNITY BIOTECHNOLOGY, INC.
Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
	2020	2019	2018
Operating activities			
Net loss	$ (93,844)	$ (82,177)	$ (76,398)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	3,449	2,663	2,180
Amortization of debt issuance costs	318	—	—
Net accretion and amortization of premium and discounts on marketable securities	256	(1,151)	(955)
Stock-based compensation	13,813	10,852	9,441
Loss on disposal of property and equipment	—	—	45
Common stock issued to third parties	1,211	965	—
Non-cash rent expense	(1,076)	—	—
Impairment of long-lived assets	2,629	—	—
Change in fair value of strategic investment	(502)	(4,507)	—
Accretion of tenant improvement allowance	—	(1,275)	(605)
Change in fair value of contingent consideration	(33)	(1,352)	4,542
Changes in operating assets and liabilities:			
Contribution receivable	—	—	1,382
Prepaid expenses and other current assets	(1,168)	(169)	(842)
Other long-term assets	628	(31)	(604)
Accounts payable	(2,640)	(227)	2,228
Accrued compensation	(517)	2,114	1,610
Accrued liabilities and other current liabilities	(857)	(587)	1,446
Deferred rent, net of current portion	—	2,461	(93)
Net cash used in operating activities	(78,333)	(72,421)	(56,623)
Investing activities			
Purchase of marketable securities	(138,486)	(119,270)	(204,086)
Maturities of marketable securities	127,915	188,809	133,644
Sale of strategic investments	6,009	—	—
Purchase of investment in stock	—	—	(500)
Purchase of property and equipment	(646)	(1,586)	(1,264)
Net cash provided by (used in) investing activities	(5,208)	67,953	(72,206)
Financing activities			
Proceeds from issuance of common stock under ATM offering program, net of issuance costs	37,270	26,085	—
Proceeds from repayment of employee promissory notes	374	—	—
Proceeds from long-term debt, net of issuance costs to lender	24,550	—	—
Payment of long-term debt non-lender issuance costs	(360)	—	—
Proceeds from issuance of convertible preferred stock, net of issuance costs	—	—	59,881
Proceeds from issuance of common stock upon exercise of stock options, net of repurchases	1,510	840	374
Proceeds from issuance of common stock under the 2018 ESPP	576	586	—
Proceeds from initial public offering, net of issuance costs	—	—	79,055
Payment of initial public offering costs	—	—	(3,201)
Proceeds from repayment of recourse notes	—	—	895
Payments made on capital lease obligations	(45)	(73)	(74)
Net cash provided by financing activities	63,875	27,438	136,930
Net increase (decrease) in cash, cash equivalents and restricted cash	(19,666)	22,970	8,101
Cash, cash equivalents and restricted cash at beginning of year	38,919	15,949	7,848
Cash, cash equivalents and restricted cash at end of year	$ 19,253	$ 38,919	$ 15,949
Supplemental Disclosures of Cash Flow Information:			
Cash paid for interest	$ 773	$ —	$ —
Supplemental Disclosures of Non-Cash Investing and Financing Activities			
Property and equipment included in accounts payable	$ 13	$ 565	$ 241
Issuance of common stock in settlement of contingent consideration milestone	$ 1,098	$ —	$ —
Issuance of shares in settlement of share-based liability	$ 100	$ —	$ —
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 27,714	$ —	$ —
Lessor funded lease incentives included in property and equipment	$ —	$ 10,651	$ —
Receipt of promissory note for purchase of common stock	$ —	$ —	$ 400
Receipt of promissory note from related party for purchase of common stock	$ —	$ 27	$ 390

See accompanying notes to the financial statements.

1. Organization

Description of Business

Unity Biotechnology, Inc. (the "Company") is a biotechnology company engaged in the research and development of therapeutics to slow, halt, or reverse diseases of aging. The Company devotes substantially all of its time and efforts to performing research and development, raising capital and recruiting personnel. The Company's headquarters are located in South San Francisco, California. The Company was incorporated in the State of Delaware in 2009 and operates in one segment.

Liquidity

The Company has incurred operating losses and has an accumulated deficit as a result of ongoing efforts to develop drug product candidates, including conducting preclinical and clinical trials and providing general and administrative support for these operations. The Company had an accumulated deficit of $339.3 million as of December 31, 2020. During the year ended December 31, 2020, the Company incurred a net loss of $93.8 million and used $78.3 million of cash in operating activities. To date, none of the Company's drug candidates have been approved for sale, and therefore, the Company has not generated any revenue from contracts with customers and does not expect positive cash flows from operations in the foreseeable future. The Company has financed its operations primarily through private placements of preferred stock and promissory notes, public equity issuances and more recently, from its ATM Offering Program (as defined below) and the Term Loan Facility (as defined below), and will continue to be dependent upon equity and/or debt financing until the Company is able to generate positive cash flows from its operations. See Note 8, "Term Loan Facility".

The Company had cash, cash equivalents and marketable securities of $115.6 million as of December 31, 2020. The Company has evaluated and concluded there are no conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a period of 12 months following the date that these financial statements are issued. Management expects operating losses to continue for the foreseeable future. As a result, the Company will need to raise additional capital. If sufficient funds on acceptable terms are not available when needed, the Company could be required to significantly reduce its operating expenses and delay, reduce the scope of, or eliminate one or more of its development programs. Failure to manage discretionary spending or raise additional financing, as needed, may adversely impact the Company's ability to achieve its intended business objectives.

2. Summary of Significant Accounting Policies

Basis of Presentation

These financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and the rules and regulations of Securities and Exchange Commission ("SEC") for reporting.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The Company bases its estimates on historical experience and market-specific or other relevant assumptions that it believes are reasonable under the circumstances. The amounts of assets and liabilities reported in the Company's balance sheets and the amount of expenses and income reported for each of the periods presented are affected by estimates and assumptions, which are used for, but are not limited to, determining the fair value of assets and liabilities, contingent consideration liability, the fair value of right-of-use assets and lease liabilities, and stock-based compensation. Actual results could differ from such estimates or assumptions.

Segments

The Company has one operating segment. The Company's chief operating decision maker, its Chief Executive Officer, manages the Company's operations on a consolidated basis for the purposes of allocating resources.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with original maturities of 90 days or less from the date of purchase to be cash equivalents. Cash equivalents primarily include money market funds that invest in U.S. Treasury obligations which are stated at fair value.

The Company has issued letters of credit under its lease agreements which have been collateralized. This cash is classified as noncurrent restricted cash on the balance sheet based on the term of the underlying lease.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheets that sum to the total of the same amounts shown in the statements of cash flows (in thousands).

	December 31,		
	2020	2019	2018
Cash and cash equivalents	$ 17,807	$ 37,473	$ 15,399
Restricted cash	1,446	1,446	550
Total cash, cash equivalents, and restricted cash	$ 19,253	$ 38,919	$ 15,949

Marketable Securities

The Company generally invests its excess cash in investment grade, short to intermediate-term, fixed income securities. Such investments are considered available-for-sale debt securities, and reported at fair value with unrealized gains and losses included as a component of stockholders' equity (deficit). Marketable securities with original maturities of greater than 90 days from the date of purchase but less than one year from the balance sheet date that are available to be converted into cash to fund current operations are classified as short-term, while marketable securities with maturities in one year or beyond one year from the balance sheet date are classified as long-term. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the statements of operations and comprehensive loss. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on marketable securities are included in interest income (expense), net. The cost of securities sold is determined using the specific identification method.

The Company periodically evaluates whether declines in fair values of its marketable securities below their book value are other-than-temporary. This evaluation consists of several qualitative and quantitative factors regarding the severity and duration of the unrealized loss as well as the Company's ability and intent to hold the marketable security until a forecasted recovery occurs. Additionally, the Company assesses whether it has plans to sell the security or it is more likely than not it will be required to sell any marketable securities before recovery of its amortized cost basis. Factors considered include quoted market prices, recent financial results and operating trends, implied values from any recent transactions or offers of investee securities, credit quality of debt instrument issuers, other publicly available information that may affect the value of the marketable security, duration and severity of the decline in value, and management's strategy and intentions for holding the marketable security. To date, the Company has not recorded any impairment charges on its marketable securities related to other-than-temporary declines in market value.

Strategic Investments

The Company has previously made investments in strategic partners and may do so again in the future. The Company does not intend to have a controlling interest or significant influence when it makes these strategic investments. Investments in equity securities of strategic partners with readily determinable fair values are measured using quoted market prices, with changes recorded through other income (expense), net in the statement of operations and comprehensive loss.

Fair Value Measurements

The Company's financial instruments during the periods presented consist of cash and cash equivalents, restricted cash, marketable securities, strategic investments, prepaid expenses and other current assets, accounts payable, accrued compensation, accrued and other current liabilities, contingent consideration liabilities, and long-term debt. Fair value estimates of these instruments are made at a specific point in time, based on relevant market information. These estimates may be subjective in nature and involve uncertainties and matters of judgment.

Concentrations of Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash, cash equivalents, restricted cash and marketable securities. Substantially all of the Company's cash and cash equivalents and restricted cash is deposited in accounts with financial institutions that management believes are of high credit quality. Such deposits have and will continue to exceed federally insured limits. The Company maintains its cash with accredited financial institutions and accordingly, such funds are subject to minimal credit risk. The Company has not experienced any losses on its cash deposits.

The Company's investment policy limits investments in marketable securities to certain types of securities issued by the U.S. government, its agencies and institutions with investment-grade credit ratings and places restrictions on maturities and concentration by type and issuer. The Company is exposed to credit risk in the event of a default by the financial institutions holding its cash, cash equivalents, restricted cash and marketable securities and issuers of marketable securities to the extent recorded on the balance sheets. As of December 31, 2020, the Company had no off-balance sheet concentrations of credit risk.

The Company depends on third-party suppliers for key raw materials used in its manufacturing processes and is subject to certain risks related to the loss of these third-party suppliers or their inability to supply the Company with adequate raw materials.

In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. To date, the Company's operations have not been significantly impacted by the COVID-19 pandemic. However, the Company cannot at this time predict the specific extent, duration, or full impact that the COVID-19 pandemic will have on its financial condition and results of operations, including ongoing and planned clinical studies. The impact of the COVID-19 pandemic on the financial performance of the Company will depend on future developments. These developments and the impact of the COVID-19 pandemic on the financial markets and the overall economy are highly uncertain. The Company continues to monitor the impact the COVID-19 pandemic may have on the clinical development of its product candidates, including potential delays or modifications to its ongoing and planned studies.

Research and Development Expenses and Accruals

Costs related to research, design and development of drug candidates are charged to research and development expense as incurred. Research and development costs include, but are not limited to, payroll and personnel expenses for personnel contributing to research and development activities, laboratory supplies, outside services, licenses acquired to be used in research and development, manufacturing of clinical material, pre-clinical testing and consultants and allocated overhead, including rent, equipment, depreciation and utilities. Research and development costs are expensed as incurred unless there is an alternative future use in other research and development projects. Payments made prior to the receipt of goods or services to be used in research and development are deferred and recognized as expense in the period in which the related goods are received or services are rendered. Such payments are evaluated for current or long-term classification based on when they will be realized.

As part of the process of preparing its financial statements, the Company is required to estimate expenses resulting from its obligations under contracts with vendors and consultants and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary from contract to contract and may result in payment flows that do not match the periods over which materials or services are provided under such contracts. The Company's objective is to reflect the appropriate expenses in its financial statements by matching those expenses with the period in which services and efforts are expended. The Company accounts for these expenses according to the progress of the production of clinical trial materials or based on progression of the clinical trial, as measured by patient progression and the timing of various aspects of the trial. The Company determines accrual estimates by taking into account discussion with applicable personnel and outside service providers as to the progress or state of consummation of goods and services, or the services completed.

During the course of a clinical trial, the rate of expense recognition is adjusted if actual results differ from the Company's estimates. The Company makes estimates of accrued expenses as of each balance sheet date in its financial statements based on the facts and circumstances known at that time. The clinical trial accrual is dependent in part upon the timely and accurate reporting of contract research organizations, contract manufacturers and other third-party vendors. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting changes in estimates in any particular period. Adjustments to prior period estimates have not been material for the years ended December 31, 2020 and 2019.

Contingent Consideration Liability

The Company has entered into and may continue to enter into, license agreements to access and utilize certain technology. In each case, the Company evaluates whether the license agreement results in the acquisition of an asset or a business. To date, all of the Company's license agreements have been considered acquisitions of assets and none have been considered acquisitions of a business. For license agreements that are considered to be acquisitions of assets, the upfront payments for such license, as well as any future milestone payments made before product approval, are immediately recognized as research and development expense when due, provided there is no alternative future use of the rights in other research and development projects. Some of the Company's license agreements also include contingent consideration in the form of an obligation to issue additional shares of the Company's common stock based on the achievement of certain milestones. The Company assesses on a continuous basis whether (i) such contingent consideration meets the definition of a derivative, and (ii) whether it can be classified within stockholders' equity. Until such time when equity classification criteria are met or the milestones expire, the contingent consideration is classified as a liability. The derivative related to this contingent consideration is measured at fair value as of each balance sheet date with the related change in fair value being reflected in operating expenses. Upon a reassessment event that results in the contingent consideration no longer meeting the definition of a derivative and/or meeting equity classification criteria, the final change in fair value of the instrument is recorded within operating expenses and the liability is reclassified into stockholders' equity.

Variable Interest Entities

The Company reviews agreements it enters into with third-party entities, pursuant to which the Company may have a variable interest in the entity, in order to determine if the entity is a variable interest entity ("VIE"). If the entity is a VIE, the Company assesses whether or not it is the primary beneficiary of that entity. In determining whether the Company is the primary beneficiary of an entity, the Company applies a qualitative approach that determines whether it has both (i) the power to direct the economically significant activities of the entity and (ii) the obligation to absorb losses of, or the right to receive benefits from, the entity that could potentially be significant to that entity. If the Company determines it is the primary beneficiary of a VIE, it consolidates that VIE into the Company's financial statements. The Company's determination about whether it should consolidate such VIEs is made continuously as changes to existing relationships or future transactions may result in a consolidation or deconsolidation event.

Property and Equipment, Net

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the respective assets, generally three years. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the term of the lease. Depreciation and amortization begins at the time the asset is placed in service. Maintenance and repairs are charged to expense as incurred and costs of improvement are capitalized.

Leases

Prior to January 1, 2020, the Company accounted for its leases of office space and laboratory facilities under non-cancelable operating lease agreements and recognized related rent expense on a straight-line basis over the term of the lease. Incentives granted under the Company's facilities lease, including allowances to fund leasehold improvements and rent holidays, were recognized as reductions to rental expense on a straight-line basis over the term of the lease. Lessor funded leasehold improvement incentives not yet received were recorded in prepaid expenses and other current assets on the balance sheets. The Company did not assume renewals in its determination of the lease term unless they were deemed to be reasonably assured at the inception of the lease and began recognizing rent expense on the date that it obtained the legal right to use and control the leased space. Deferred rent consisted of the difference between cash payments and the rent expense recognized. The Company recognized a

liability for costs that would continue to be incurred under a lease contract for its remaining term without economic benefit at its fair value when the entity ceased using the right conveyed by the contract, which was when the space was completely vacated. The Company also entered into capital lease agreements for certain equipment with a lease term of three years. The current portion of capital lease obligations was included in accrued and other current liabilities and the noncurrent capital lease obligations was included in other noncurrent liabilities on the balance sheets.

Subsequent to January 1, 2020, the Company determines whether the arrangement is or contains a lease at the inception of the arrangement and if so, whether such a lease is classified as a financing lease or an operating lease. Operating leases are included in operating lease right-of-use assets, ("ROU assets"), operating lease liabilities, net of current portion, and accrued and other current liabilities on the Company's balance sheets. The Company has elected not to recognize on the balance sheets leases with terms of one year or less. Operating lease ROU assets represent the Company's right to use an underlying asset for the lease term and are considered long-lived assets for purposes of identifying, recognizing and measuring impairment. Operating lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and operating lease liabilities are recognized based on the present value of lease payments over the expected lease term. As the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment, in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made or incentives received and impairment charges if the Company determines the ROU asset is impaired and excludes lease incentives. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise such options to extend or terminate the lease. Lease expense for lease payments is recognized on a straight-line basis over the lease term. The Company has elected to not separate lease and non-lease components for its leased assets and accounts for all lease and non-lease components of its agreements as a single lease component. The lease components resulting in a ROU asset have been recorded on the balance sheets and are amortized as lease expense on a straight-line basis over the lease term.

The Company does not have any material financing leases.

Impairment of Long-Lived Assets

The Company evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be fully recoverable. If indicators of impairment exist and the undiscounted future cash flows that the assets are expected to generate are less than the carrying value of the assets, the Company reduces the carrying amount of the assets through an impairment charge, to their estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values. During the year ended December 31, 2020, the Company evaluated indicators of impairment for the ROU asset and related leasehold improvements considering the current economic environment and COVID-19 outbreak, its impact on subleasing activity and the exit of its previous headquarters located in Brisbane, California. The Company concluded the carrying value of these assets were not fully recoverable and recorded an impairment charge of $2.6 million. See Note 7, "Commitments and Contingencies".

Determining estimated discounted cash flows for purposes of an impairment analysis requires the Company to make estimates and assumptions regarding the amount and timing of sublease income. There are often risks and uncertainties associated with the intent to sublease offices and laboratory space. Consequently, the eventual realized sublease revenues may vary from estimates as of the impairment testing date and adjustments may occur in future periods. Furthermore, the Company's sublease assumptions could be further impacted by the COVID-19 outbreak.

Stock-Based Compensation

The Company measures compensation expense for all stock-based awards based on their grant date fair value. For stock-based awards with service conditions only, stock-based compensation expense is recognized over the requisite service period using the straight-line method. For awards with performance conditions, the Company evaluates the probability of achieving performance condition at each reporting date. The Company begins to recognize stock-based compensation expense using an accelerated attribution method when it is deemed probable that the performance condition will be met. Forfeitures are recognized as they occur.

The Company uses the Black-Scholes option-pricing model to estimate the fair value of stock option awards that do not contain market conditions. The Black-Scholes option-pricing model requires assumptions to be made related to the expected term of an award, expected dividends, expected volatility and risk-free rate. The Company has used the

lattice model to estimate the fair value of stock option awards that contain both performance and market conditions and the Monte-Carlo option-pricing model to estimate the fair value of stock option awards that contain only market conditions. Lattice models require the use of subjective and complex assumptions which determine the fair value of such awards including price volatility of the underlying stock and derived service periods. The Monte-Carlo option pricing model uses similar input assumptions as the Black-Scholes model; however, it further incorporates into the fair-value determination the possibility that the market condition may not be satisfied.

Restructuring

The Company recognizes restructuring charges related to reorganization plans that have been committed to by management and when liabilities have been incurred. In connection with these activities, the Company records restructuring charges at fair value for a) contractual employee termination benefits when obligations are associated to services already rendered, rights to such benefits have vested, and payment of benefits is probable and can be reasonably estimated, and b) one-time employee termination benefits when management has committed to a plan of termination, the plan identifies the employees and their expected termination dates, the details of termination benefits are complete, it is unlikely changes to the plan will be made or the plan will be withdrawn and communication to such employees has occurred.

One-time employee termination benefits are recognized in their entirety when communication has occurred, and future services are not required. Contract termination costs to be incurred over the remaining contract term without economic benefit are recorded in their entirety when the contract is canceled.

The recognition of restructuring charges requires the Company to make certain judgments and estimates regarding the nature, timing and amount of costs associated with the planned reorganization plan. At the end of each reporting period, the Company evaluates the remaining accrued restructuring balances to ensure that no excess accruals are retained, and the utilization of the provisions are for their intended purpose in accordance with developed restructuring plans.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes, in which deferred tax assets and liabilities are recognized for future tax consequences attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be reversed. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income in the period that includes the enactment date. A valuation allowance is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized.

The Company’s tax positions are subject to income tax audits. The Company recognizes the tax benefit of an uncertain tax position only if it is more likely than not that the position is sustainable upon examination by the taxing authority, based on the technical merits. The tax benefit recognized is measured as the largest amount of benefit which is more likely than not to be realized upon settlement with the taxing authority. The Company recognizes interest accrued and penalties related to unrecognized tax benefits in its tax provision. The Company evaluates uncertain tax positions on a regular basis. The evaluations are based on a number of factors, including changes in facts and circumstances, changes in tax law, correspondence with tax authorities during the course of the audit, and effective settlement of audit issues. The provision for income taxes includes the effects of any accruals that the Company believes are appropriate, as well as the related net interest and penalties.

On March 18, 2020, the Families First Coronavirus Response Act (“FFCR Act”), and on March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) were each enacted in response to the COVID-19 pandemic. The FFCR Act and the CARES Act contain numerous tax-related provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property.

On June 29, 2020 California State Assembly Bill 85 (the “Trailer Bill”) was enacted which suspends the use of California net operating loss (“NOL”) deductions and certain tax credits, including research and development tax credits, for the 2020, 2021, and 2022 tax years.

In December 2020, the Consolidated Appropriations Act, 2021 (the "CAA") was signed into law. The CAA included additional funding through tax credits as part of its economic package for 2021.

The FFCR Act, CARES Act, Trailer Bill and CAA did not have a material impact on the Company's financial statements as of December 31, 2020; however, the Company continues to examine the impacts the FFCR Act, CARES Act and Trailer Bill may have on its business, results of operations, financial condition and liquidity.

Net Loss per Common Share

Basic net loss per share is calculated by dividing net loss by the weighted average number of shares outstanding for the period. Diluted net loss per share is calculated by dividing net loss by the weighted average number of shares of common stock and potential dilutive common stock equivalents outstanding during the period if the effect is dilutive. Since the Company was in a loss position for all periods presented, basic net loss per share is the same as diluted net loss per share as the effects of potentially dilutive securities are antidilutive. The calculation of diluted earnings (loss) per share also requires that, to the extent the presumed issuance of additional shares as contingent consideration is dilutive to earnings (loss) per share for the period, adjustments to net income or net loss used in the calculation are required to remove the change in fair value of the contingent consideration liability for the period. Likewise, adjustments to the denominator are required to reflect the related dilutive shares. In all periods presented, the Company's outstanding stock options, convertible preferred stock, early exercised common stock subject to future vesting, restricted stock accounted for as options common and preferred stock warrants and presumed issuance of additional shares as contingent consideration were excluded from the calculation of diluted net loss per share because their effects were antidilutive.

Comprehensive Loss

Comprehensive loss includes net loss and certain changes in stockholders' equity (deficit) that are excluded from net loss, primarily unrealized losses on the Company's marketable securities.

Recently Adopted Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which removes certain exceptions to the general principles in Topic 740 related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The new guidance also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. This ASU is effective for the Company for all interim and annual periods beginning January 1, 2022, with early adoption permitted. The Company early adopted ASU 2019-12 beginning January 1, 2020 on a prospective basis. The adoption of this standard did not have a material impact on its financial statements and related disclosures. The only aspect of ASU 2019-12 that is currently applicable to the Company is the removal of the exception related to intraperiod tax allocation. The Company began applying the general methodology regarding the intraperiod allocation of tax expense in 2020. After the adoption of ASU 2019-12, in periods where the Company has a loss from continuing operations, the amount of taxes attributable to continuing operations will be determined without regard to the tax effect of other items, including changes in unrealized gains related to marketable securities.

In November 2018, the FASB issued ASU No. 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606* (ASU 2018-18), which clarifies that certain transactions between collaborative arrangement participants should be accounted for as revenue under the guidance for contracts with customers (Topic 606) when the collaborative arrangement participant is a customer in the context of a unit of account. The standard is effective for interim and annual periods beginning after December 15, 2020, with early adoption permitted, including adoption in any interim period for public business entities for periods in which financial statements have not been issued. The Company adopted this standard on January 1, 2020. The adoption of this ASU did not have a material impact on the Company's financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. This ASU eliminates, modifies and adds disclosure requirements for fair value measurements. The amendments in this ASU are effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019, with early adoption permitted. The Company adopted this standard on January 1, 2020. The adoption of this ASU did not have a material impact on its financial statements but did result in enhanced disclosures related to the recurring Level 3 fair value measurements.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. The amendments in this ASU expand the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. This new guidance is effective for the Company in fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company adopted this standard on January 1, 2020. The adoption of this ASU did not have a material impact on its financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, and related amendments which supersedes the guidance in former ASC 840, Leases. The new standard, as amended by subsequent ASUs on the Topic, requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases today. On November 15, 2019, the FASB issued ASU 2019-10 to delay the effective date of this standard, making it effective for the Company for annual reporting periods beginning after December 15, 2020, and interim periods within annual periods beginning after December 15, 2021, with early adoption permitted.

The Company adopted this standard on January 1, 2020 using the modified retrospective approach with a cumulative effect adjustment to accumulated deficit at the beginning of the period of adoption, if any. The Company elected the package of practical expedients permitted under the transition guidance within Topic 842, which allowed the Company to carry forward the historical lease classification, retain the initial direct costs for any leases that existed prior to the adoption of the standard and not reassess whether any contracts entered into prior to the adoption are leases. The Company also elected to account for lease and non-lease components in its lease agreements as a single lease component in determining lease assets and liabilities. In addition, the Company elected not to recognize the right-of-use assets and liabilities for leases with lease terms of one year or less. The Company did not elect the practical expedient allowing the use-of-hindsight, which would require the Company to reassess the lease term of its leases based on all facts and circumstances through the effective date and did not elect the practical expedient pertaining to land easements as this is not applicable to the current contract portfolio.

Upon adoption of Topic 842, the Company recorded $42.4 million of operating lease liabilities and $27.2 million of right-of-use assets after reclassification of deferred rent of $15.3 million, as of January 1, 2020. The adoption did not have a material impact on the Company’s statements of operations and comprehensive loss or statements of cash flows. See Note 7, “Commitments and Contingencies” for additional information.

Recently Issued Accounting Pronouncements Not Yet Adopted

In October 2020, the FASB issued ASU 2020-10, *Codification Improvements*. The ASU contains improvements to the Codification by ensuring that all guidance that requires or provides an option for an entity to provide information in the notes to financial statements is codified in the disclosure section of the Codification. The ASU also improves various topics in the Codification so that entities can apply guidance more consistently on codifications that are varied in nature where the original guidance may have been unclear. The amendments in ASU 2020-10 are effective for the Company for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. Early adoption is permitted. The Company does not expect the adoption of ASU 2020-10 to have a material impact on its financial statements and related disclosures.

In August 2020, the FASB issued ASU No. 2020-06 , *Debt - Debt with Conversion and Other Options* (Subtopic 470-20) and *Derivatives and Hedging - Contracts in Entity’s Own Equity*. ASU 2020-06 eliminates the beneficial conversion and cash conversion accounting models for convertible instruments. It also amends the accounting for certain contracts in an entity’s own equity that are currently accounted for as derivatives because of specific settlement provisions. In addition, ASU 2020-06 modifies how particular convertible instruments and certain contracts that may be settled in cash or shares impact the diluted EPS computation. The amendments in ASU 2020-06 are effective for smaller reporting companies as defined by the SEC for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020. The Company is currently evaluating the impact of ASU 2020-06 on its financial statements.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles (Topic 350): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. This new standard also requires customers to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement. This standard is effective for the Company for annual reporting periods beginning after December 15, 2020, and interim periods within annual periods beginning after December 15, 2021. This new standard can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company is currently evaluating the impact of adoption on its financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments*, as clarified in subsequent amendments. ASU 2016-13 changes the impairment model for certain financial instruments. The new model is a forward-looking expected loss model and will apply to financial assets subject to credit losses and measured at amortized cost and certain off-balance sheet credit exposures. This includes loans, held-to-maturity debt securities, loan commitments, financial guarantees and net investments in leases, as well as trade receivables. For available-for-sale debt securities with unrealized losses, credit losses will be measured in a manner similar to today, except that the losses will be recognized as allowances rather than reductions in the amortized cost of the securities. In October 2019, the FASB voted to delay the effective date of this standard. Topic 326 will be effective for the Company for fiscal years beginning after December 15, 2022. Early adoption is permitted. The Company is currently assessing the effect that this ASU will have on its financial position, results of operations, and disclosures.

3. Fair Value Measurements

The Company determines the fair value of financial and non-financial assets and liabilities based on the assumptions that market participants would use in pricing the asset or liability in an orderly transaction between market participants at the measurement date. The identification of market participant assumptions provides a basis for determining what inputs are to be used for pricing each asset or liability. A fair value hierarchy has been established which gives precedence to fair value measurements calculated using observable inputs over those using unobservable inputs. This hierarchy prioritized the inputs into three broad levels as follows:

- Level 1: Quoted prices in active markets for identical instruments
- Level 2: Other significant observable inputs (including quoted prices in active markets for similar instruments)
- Level 3: Significant unobservable inputs (including assumptions in determining the fair value of certain investments)

The carrying amounts of financial instruments such as cash and cash equivalents, restricted cash, prepaid expenses and other current assets, accounts payable, accrued compensation, accrued and other current liabilities approximate the related fair values due to the short maturities of these instruments. As the long-term debt is subject to variable interest rates that are based on market rates which are regularly reset, considering level 2 inputs, the Company believes the carrying value of the long-term debt approximates its fair value.

The fair value of the Company's cost method investment was measured when it was deemed to be other-than-temporarily impaired until the nature of the underlying investment changed to be an equity security with a readily determinable fair value which is measured at fair value on a recurring basis.

The Company's financial assets subject to fair value measurements on a recurring basis and the level of inputs used in such measurements were as follows (in thousands):

	December 31, 2020			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash equivalents:				
Money market funds	$ 13,686	$ 13,686	$ —	$ —
Total cash equivalents	13,686	13,686	—	—
Short-term marketable securities:				
U.S. treasuries	55,349	—	55,349	—
U.S. and foreign commercial paper	11,999	—	11,999	—
U.S. and foreign corporate debt securities	1,001	—	1,001	—
U.S. government debt securities	11,543	—	11,543	—
Total short-term marketable securities	79,892	—	79,892	—
Long-term marketable securities				
U.S. treasuries	7,370	—	7,370	—
U.S. government debt securities	10,501	—	10,501	—
Total long-term marketable securities	17,871	—	17,871	—
Total assets subject to fair value measurements on a recurring basis	$ 111,449	$ 13,686	$ 97,763	$ —

	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash equivalents:				
Money market funds	$ 29,377	$ 29,377	$ —	$ —
U.S. and foreign commercial paper	4,999	—	4,999	—
U.S government debt securities	2,550	—	2,550	—
Total cash equivalents	36,926	29,377	7,549	—
Short-term marketable securities:				
U.S. treasuries	15,063	—	15,063	—
U.S. and foreign commercial paper	11,972	—	11,972	—
U.S. and foreign corporate debt securities	8,755	—	8,755	—
U.S. government debt securities	48,718	—	48,718	—
Total short-term marketable securities	84,508	—	84,508	—
Strategic investments				
Foreign equity securities	5,507	5,507	—	—
Total strategic investments	5,507	5,507	—	—
Long-term marketable securities				
U.S. treasuries	3,025	—	3,025	—
Total long-term marketable securities	3,025	—	3,025	—
Total assets subject to fair value measurements on a recurring basis	$ 129,966	$ 34,884	$ 95,082	$ —
Liabilities:				
Contingent consideration liability	$ 1,131	$ —	$ —	$ 1,131
Total liabilities subject to fair value measurements on a recurring basis	$ 1,131	$ —	$ —	$ 1,131

The Company estimates the fair value of its money market funds, U.S. and foreign commercial paper, U.S. and foreign corporate debt securities, U.S. treasuries, U.S. government debt securities and foreign equity securities by taking into consideration valuations obtained from third-party pricing services. The pricing services utilize industry standard valuation models, including both income and market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker/dealer quotes on the same or similar securities, issuer credit spreads; benchmark securities; prepayment/default projections based on historical data; and other observable inputs. See Note 4, "Marketable Securities," for further information regarding the carrying value of the Company's financial instruments.

The Company held an equity investment in Ascentage International, an affiliate of Ascentage Pharma. The equity interest represented an insignificant level of ownership in the investee and was recorded within strategic investment on the Company's balance sheets. See Note 5, "License Agreements and Strategic Investment". In October 2019, Ascentage International completed an initial public offering of common stock on the Hong Kong Stock Exchange. Following the initial public offering, the Company's underlying investment changed to be an equity security with a readily determinable fair value which was measured at fair value on a recurring basis based on quoted stock prices available on the Hong Kong Stock Exchange, which are considered observable inputs (Level 1). During the year ended December 31, 2020, the Company sold its entire equity investment in Ascentage International. The fair value of the Company's equity investment in Ascentage International was zero and $5.5 million as of December 31, 2020 and 2019, respectively, and was included in strategic investment on the Company's balance sheets. The change in fair value of this investment was $0.5 million and $4.5 million for the years ended December 31, 2020 and 2019, respectively, and was recorded in other income (expense), net on the statements of operations and comprehensive loss.

The Company had previously recorded a contingent consideration liability related to three agreements (the "Commercial Agreements") with Ascentage Pharma Group Corp. Limited, a clinical-stage biopharmaceutical company based in Hong Kong China ("Ascentage Pharma"). See Note 5, "License Agreements and Strategic Investment". The fair value of the contingent consideration liability at December 31, 2019 included inputs not observable in the market and thus represented a Level 3 measurement. The probability of achieving the defined milestone events under the Commercial Agreements was estimated on a quarterly basis by the Company's management using a probability-weighted valuation approach model which utilized current stock price and reflected the probability and timing of future issuances of shares. As a result of settlements and changes made to the Commercial Agreements, there was no contingent consideration liability at December 31, 2020.

The following table provides a reconciliation of liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) (in thousands):

	Amount
Balance at December 31, 2018	$ 2,483
Additions	—
Settlements	—
Change in fair value	(1,352)
Balance at December 31, 2019	1,131
Additions	—
Settlements	(1,098)
Change in fair value	(33)
Balance at December 31, 2020	$ —

4. Marketable Securities

Marketable securities, which are classified as available-for-sale, consisted of the following (in thousands):

	December 31, 2020			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Money market funds	$ 13,686	$ —	$ —	$ 13,686
Total cash equivalents	13,686	—	—	13,686
Short-term marketable securities:				
U.S. and foreign commercial paper	11,998	1	—	11,999
U.S. and foreign corporate debt securities	1,001	—	—	1,001
U.S. government debt securities	11,541	2	—	11,543
U.S. treasuries	55,350	2	(3)	55,349
Total short-term marketable securities	79,890	5	(3)	79,892
Long-term marketable securities				
U.S. treasuries	7,369	1	—	7,370
U.S. government debt securities	10,498	3	—	10,501
Total long-term marketable securities	17,867	4	—	17,871
Total marketable securities	$ 111,443	$ 9	$ (3)	$ 111,449

	December 31, 2019			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Money market funds	$ 29,377	$ —	$ —	$ 29,377
U.S. and foreign commercial paper	4,999	—	—	4,999
U.S. government debt securities	2,550	—	—	2,550
Total cash equivalents	36,926	—	—	36,926
Short-term marketable securities:				
U.S. and foreign commercial paper	11,965	7	—	11,972
U.S. and foreign corporate debt securities	8,748	8	(1)	8,755
U.S. government debt securities	48,647	71	—	48,718
U.S. treasuries	15,057	6	—	15,063
Total short-term marketable securities	84,417	92	(1)	84,508
Long-term marketable securities				
U.S. treasuries	3,025	—	—	3,025
Total long-term marketable securities	3,025	—	—	3,025
Total marketable securities	$ 124,368	$ 92	$ (1)	$ 124,459

At December 31, 2020, the remaining contractual maturities of available-for-sale debt securities were less than one year. There have been no significant realized gains or losses on available-for-sale debt securities for the periods presented. Available-for-sale debt securities that were in a continuous loss position but were not deemed to be other than temporarily impaired were immaterial at both December 31, 2020 and 2019. The Company does not intend to and believes it is not more likely than not that it will be required to sell these debt securities before their maturities.

See Note 3, “Fair Value Measurements,” for further information regarding the fair value of the Company's financial instruments.

5. License Agreements and Strategic Investment

License and Compound Library and Option Agreement

The Company is a party to three agreements with Ascentage Pharma: (a) a compound library and option agreement executed in February 2016 granting the Company the right to identify and take licenses to research, develop, and seek and obtain marketing approval for library compounds for the treatment of indications outside of oncology (the “Library Agreement”), (b) an initial license agreement executed in February 2016 granting the Company rights to an

initial Ascentage Pharma compound known as APG1252 (the "APG1252 License Agreement"), and (c) a second license agreement executed in January 2019 granting the Company rights to a second licensed compound (this second license agreement, the "Bcl License Agreement" and collectively with the Library Agreement and APG1252 License Agreement, the "Commercial Agreements"). On July 30, 2020, the Company notified Ascentage Pharma of its termination of the APG1252 License Agreement due to the Company's decision to prioritize the progression of other compounds from Ascentage International's library of Bcl-2 inhibitors, such as UBX1325 and UBX1967.

The Commercial Agreements referenced above include cash payments of up to $70.3 million as well as the equity payments of up to an aggregate of (a) 933,337 shares of common stock in the event there is only one licensed product, and (b) 1,333,338 shares of common stock in the event there are two or more licensed products, in each case to be issued based on the Company's achievement of certain preclinical and clinical development and sales milestone events. The Company is required to make 80% of all equity payments to Ascentage Pharma and the remaining 20% to an academic institution from whom Ascentage Pharma had previously licensed the technology. The milestones include the advancement of additional compounds into Investigational New Drug application ("IND") enabling studies, the filing of an IND, the commencement of clinical studies, Food and Drug Administration ("FDA") and/or European Medicines Agency approval, and a net sales threshold. The Bcl License Agreement also includes tiered royalties in the low-single digits based on sales of licensed products.

In December 2018, the Company elected to advance a second compound into formal preclinical development, which gave rise to an obligation under the compound library and option agreement to issue 133,334 shares of common stock to Ascentage Pharma and the academic institution. These shares were issued to Ascentage Pharma in January 2019 and the academic institution in March 2019.

In June 2020, the Company entered into a third amendment to the Bcl License Agreement. Under the terms of the original Bcl License Agreement, Ascentage Pharma granted the Company exclusive development and commercialization rights and non-exclusive manufacturing rights to an Ascentage Bcl inhibitor compound known as UBX1967 as well as the right to continue its preclinical development efforts with another Ascentage-controlled Bcl inhibitor compound, known as UBX1325, a small molecule inhibitor of the anti-apoptotic Bcl-2 family member, Bcl-xL, that served as a back-up compound to UBX1967. Under the terms of the third amendment to the Bcl License Agreement, the status of UBX1967 and UBX1325 were switched such that UBX1325 became the licensed compound and UBX1967 became the back-up compound under the Bcl License Agreement.

In July 2020, the Company filed an IND for the Phase 1 clinical study for UBX1325, which gave rise to an obligation under the Bcl License Agreement to issue an additional 133,334 shares of common stock to Ascentage Pharma and the academic institution. These shares were issued to Ascentage Pharma and the academic institution in August 2020. In October 2020, the Company initiated a Phase 1 safety and tolerability study of UBX1325 in patients with diabetic macular edema and age-related macular degeneration. As a result of the first patient dosed in the UBX1325 study, the Company triggered a milestone payment of $1.0 million to Ascentage Pharma, which the Company elected to settle in shares of the Company's common stock. The Company issued 228,310 shares of its common stock to Ascentage Pharma in November 2020 with a fair market value of $1.2 million at settlement date. The payment was recognized as research and development expense in the statement of operations and comprehensive loss during the year ended December 31, 2020.

As of December 31, 2020, the Company had issued 974,980 shares of common stock to Ascentage Pharma and 186,667 shares of common stock to the academic institution from whom Ascentage Pharma had previously licensed the technology.

The Commercial Agreements included contingent consideration in the form of additional issuances of shares of the Company's common stock based on the achievement of the specified milestones. Upon the July 2020 termination of the license to APG1252, the Company determined that the contingency no longer applied and adjusted the fair value of the contingent consideration liability to zero. The Company had recorded a contingent consideration liability of $1.1 million at December 31, 2019 based on the estimates for milestone achievements at the time. To date, no royalties were due from the sales of licensed products.

Strategic Investment

In April 2016, in connection with the Commercial Agreements, the Company purchased an interest in an affiliate of Ascentage Pharma for an aggregate purchase price of $0.5 million. In May 2018, this interest was exchanged for an interest in a newly formed affiliate of Ascentage Pharma called Ascentage International as part of a reorganization of those entities. The Company also invested an additional $0.5 million in Ascentage International in May 2018

which was recorded within other long-term assets on the Company's balance sheet as of December 31, 2018.

In October 2019, Ascentage International completed an initial public offering of shares of its common stock on the Hong Kong Stock Exchange at HK$34.20 (approximately USD $4.36) per share. In connection with Ascentage International's initial public offering, the Company's interest converted into shares of common stock of Ascentage International. The Company determined that its investment in Ascentage International met the definition of an equity security with a readily determinable fair value which was measured at fair value on a recurring basis based on quoted stock price available on the Hong Kong Stock Exchange. The Company was subject to a lock-up agreement with Ascentage International that precluded the Company from selling shares prior to April 28, 2020. During the year ended December 31, 2020, the Company sold its entire holdings in Ascentage International for cash proceeds of $6.0 million and recorded a corresponding loss of $2.2 million. The Company's total original investment in Ascentage was $1.0 million. The fair value of the Company's investment in Ascentage International as of December 31, 2019 was $5.5 million, which was included in strategic investment.

The Company agreed to provide funding to Ascentage Pharma for research and development work performed at a cost of up to $2.0 million through February 2020. The research and development expense under the research services agreement was not material.

Other License Agreements with Research Institutions

In May 2019, the Company entered into a license agreement with The Regents of the University of California on behalf its San Francisco campus (collectively, "UCSF") which provides the Company the rights to certain patents and related know-how to make, use, sell, offer for sale and import certain products and practice certain methods for use in the development of human therapeutics, which excludes the provision of services to third parties for consideration of any kind. The license to the Company is subject to UCSF's reserved rights under the licensed intellectual property for educational and non-commercial research purposes and a requirement to substantially manufacture any licensed products in the United States. The Company is obligated to use diligent efforts to develop and obtain regulatory approval for at least one product commercialized pursuant to the agreement, and must meet certain regulatory and development milestones. In June 2019, as part of this license agreement, the Company issued 120,000 shares of its common stock to UCSF. In addition, the Company is obligated to pay an annual license maintenance fee and may be obligated to make milestone payments or issue up to an additional 34,000 shares of its common stock upon the occurrence of specified development events, up to aggregate milestone payments of $13.6 million for each product licensed under the agreement, and upon commercialization, to make royalty payments in the low single digit percentages (subject to a specified minimum annual royalty) based on net sales of products commercialized pursuant to the agreement. None of these events had occurred and no milestone payments or royalty payments had been recognized as of December 31, 2020. The upfront issuance of 120,000 shares of the Company's common stock was valued at $1.0 million and recorded as additional paid-in capital upon issuance in June 2019.

The Company has also entered into license agreements with various research institutions which have provided the Company with rights to patents, and in certain cases, research "know-how" and proprietary research tools to research, develop and commercialize drug candidates. In addition to upfront consideration paid to these various research institutions in either cash or shares of the Company's common stock, the Company may be obligated to make milestone payments, payable in cash and/or the issuance of shares of the Company's common stock upon achievement of certain specified clinical development and/or sales events. The contingent consideration liability considered to be a derivative associated with the potential issuance of common stock related to these license agreements was not significant at December 31, 2020 or 2019. To date, none of these events has occurred and no contingent consideration, milestone or royalty payments have been recognized.

6. Balance Sheet Components

Property and Equipment, Net

Property and equipment, net, consists of the following (in thousands):

	December 31,	
	2020	2019
Laboratory equipment	$ 5,960	$ 5,219
Computer equipment	501	472
Furniture and fixtures	825	825
Leasehold improvements	15,083	16,436
Total property and equipment	22,369	22,952
Less: accumulated depreciation and amortization	(9,742)	(6,316)
Total property and equipment, net	$ 12,627	$ 16,636

Depreciation and amortization expense related to property and equipment was $3.4 million, $2.7 million and $2.2 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Accrued and Other Current Liabilities

Accrued and other current liabilities consist of the following (in thousands):

	December 31,	
	2020	2019
Operating lease liability - current portion	$ 4,520	$ —
Accrued research and development	1,638	2,214
Deferred rent, current portion	—	1,849
Liability related to early exercise shares	21	237
Accrued other	371	695
	$ 6,550	$ 4,995

7. Commitments and Contingencies

Leases

In February 2019, the Company entered into a lease agreement for new office and laboratory space in South San Francisco, California. The term of the lease agreement commenced in May 2019. The lease has an initial term of ten years from the commencement date, and the Company has an option to extend the initial term for an additional eight years at the then market rental rates. The total base rent payment escalates annually based on a fixed percentage beginning from the 13th month of the lease agreement. The Company will also be responsible for the operating expenses and real estate taxes allocated to the building and common areas. Pursuant to the lease agreement, the landlord provided the Company with a tenant improvement allowance of $10.7 million, which was included in deferred rent and leasehold improvements on the balance sheet at December 31, 2019. In connection with the execution of the lease agreement, the Company delivered a letter of credit of approximately $0.9 million to the landlord.

In May 2016, the Company executed a non-cancellable lease agreement for office and laboratory space in Brisbane, California which commenced in May 2016 and continues through October 2022. The lease agreement includes an escalation clause for increased rent and a renewal provision allowing the Company to extend this lease for an additional four years by giving the landlord written notice of the election to exercise the option at least fifteen months prior to the original expiration of the lease term. The lease provides for monthly base rent amounts escalating over the term of the lease and the lessor provided the Company a $3.9 million tenant improvement allowance to complete the laboratory and office renovation which was recorded as deferred rent liability and leasehold improvements within property and equipment, net. In May 2017, the Company entered into an amendment to expand the leased space and received a three-month rent holiday for the expanded space.

The Company's operating leases include various covenants, indemnities, defaults, termination rights, security deposits and other provisions customary for lease transactions of this nature.

The following table summarizes the components of lease expense, which are included in operating expenses in the Company's statements of operations and comprehensive loss (in thousands):

	Year ended December 31, 2020
Operating lease cost	$ 4,721
Variable lease cost	1,168
Impairment of operating lease right-of-use asset	1,409
Total lease cost	$ 7,298

Variable lease payments include amounts relating to common area maintenance, real estate taxes and insurance and are recognized in the statements of operations and comprehensive loss as incurred. Rent expense for the years ended December 31, 2019 and 2018 was $4.5 million and $1.8 million, respectively.

The following table summarizes supplemental information related to leases (in thousands):

	Year Ended December 31, 2020
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows from operating leases	$ 5,797
Weighted-average remaining lease term (years)	
Operating leases	8.5
Weighted-average discount rate (percentage)	
Operating leases	5.8%

The following table summarizes the maturities of lease liabilities as of December 31, 2020 (in thousands):

	Amount
2021	6,653
2022	6,283
2023	4,810
2024	4,964
2025	5,123
Thereafter	22,179
Total future minimum lease payments	50,012
Less: Amount representing interest	(11,024)
Present value of future minimum lease payments	38,988
Less: Current portion of operating lease liability	(4,520)
Noncurrent portion of operating lease liability	$ 34,468

The cumulative effect on the Company's balance sheets at January 1, 2020 from the adoption of Topic 842 was as follows (in thousands):

	December 31, 2019	Topic 842 Adjustments	January 1, 2020
Operating lease right-of-use assets	$ —	$ 27,174	$ 27,174
Accrued and other current liabilities	4,995	(1,970)	3,025
Operating lease liabilities, current portion	—	3,455	3,455
Deferred rent, net of current portion	13,298	(13,298)	—
Operating lease liabilities, net of current portion	—	38,988	38,988

In February 2020, the Company completed its move into the new office and laboratory space in South San Francisco, exited its previous offices and laboratory space in Brisbane, California, and began to actively market this

space for sublease. Concurrent with this move and in consideration of real estate market conditions, in particular due to the COVID-19 pandemic in March 2020, the Company identified indicators of impairment in the related asset group, which included the leased ROU asset and related leasehold improvements associated with the lease. The Company subsequently evaluated and compared the net book value of the asset group to the estimated undiscounted future cash flows over the remaining term of the lease and concluded that an impairment had occurred. The discounted estimated future cash flows included estimates of sublease rentals through the end of the lease term, which ends on October 31, 2022, utilizing a discount rate of 3.5% based on the Company's estimated incremental borrowing rate at that time. The estimated discounted cash flows were compared to the net book value of the ROU asset and leasehold improvements resulting in an impairment loss of $2.2 million. The loss was recorded at the end of the first quarter of 2020 in operating expense in the statements of operations and comprehensive loss.. During the remainder of the year, the Company continued to review the assets for indicators of impairment. During year end, the Company updated its estimates of sublease rental income, based on the sublease that was executed for this space in February 2021 and market factors on leasing activity caused by the COVID-19 pandemic, in the discounted estimated future cash flows, and utilizing a discount rate of 2.935%, determined when compared to the net book value of the ROU asset and leasehold improvements, there was further impairment of the assets. The Company recorded an additional impairment charge of $0.4 million, resulting in a total impairment loss of $2.6 million for the year ended December 31, 2020. The impairment loss was allocated proportionally to the right-of-use asset of $1.4 million and leasehold improvements of $1.2 million and recorded in operating expense in the statements of operations and comprehensive loss for the year ended December 31, 2020. After recording the impairment, the remaining balance of the ROU asset and leasehold improvements was $1.0 million and $0.8 million, respectively.

Indemnifications

The Company indemnifies each of its officers and directors for certain events or occurrences, subject to certain limits, while the officer or director is or was serving at the Company's request in such capacity, as permitted under Delaware law and in accordance with the Company's amended and restated certificate of incorporation and bylaws. The term of the indemnification period lasts as long as an officer or director may be subject to any proceeding arising out of acts or omissions of such officer or director in such capacity.

The maximum amount of potential future indemnification is unlimited; however, the Company currently holds director and officer liability insurance. This insurance allows the transfer of risk associated with the Company's exposure and may enable the Company to recover a portion of any future amounts paid. The Company believes that the fair value of these potential indemnification obligations is minimal. Accordingly, the Company has not recognized any liabilities relating to these obligations for any period presented.

8. Term Loan Facility

On August 3, 2020, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with Hercules Capital, Inc. ("Hercules"). Under the Loan Agreement, Hercules provided the Company with access to a term loan with an aggregate principal amount of up to $80.0 million (the "Term Loan Facility"), available in four tranches, subject to certain terms and conditions. The first tranche of $25.0 million was advanced to the Company on the date the Loan Agreement was executed. The milestones for the remaining tranches have not yet been reached and as of December 31, 2020 will not be reached as they were dependent, in whole or in part, upon continued advancement in the clinical development of UBX0101 in patients with osteoarthritis of the knee. The Company expects to make interest only payments through September 1, 2022, or extended to March 1, 2023 upon satisfaction of certain milestones, and expects to then repay the principal balance and interest in equal monthly installments through August 1, 2024.

The Company may prepay advances under the Loan Agreement, in whole or in part, at any time subject to a prepayment charge of up to 1.50% of any amount prepaid, depending upon when the prepayment occurs. Upon prepayment or repayment of all or any of the term loans under the Term Loan Facility, the Company is required to pay an end of term fee ("End of Term Fee") equal to 6.25% of the total aggregate amount of the term loans being prepaid or repaid, which has been recorded as a discount on the principal balance upon issuance.

Interest on the term loan accrues at a per annum rate equal to the greater of (i) the Wall Street Journal prime rate plus 6.10% and (ii) 9.35%. On December 31, 2020, the rate was 9.35%. Interest expense is calculated using the effective interest method and is inclusive of non-cash amortization of capitalized loan issuance costs. At December 31, 2020, the effective interest rate was 12.40%.

Under the terms of the Loan Agreement, the Company granted first priority liens and security interests in substantially all of the Company's intellectual property as collateral for the obligations thereunder. The Company also granted Hercules the right, at their discretion, to participate in any closing of any single subsequent financing up to a maximum aggregate amount of $2.0 million. The Loan Agreement also contains representations and warranties by the Company and Hercules, indemnification provisions in favor of Hercules and customary affirmative and negative covenants (including a liquidity covenant beginning July 1, 2021, requiring the Company to maintain at least a $15.0 million cash reserve), and events of default, including a material adverse change in the Company's business, payment defaults, breaches of covenants following any applicable cure period, and a material impairment in the perfection or priority of Hercules' security interest in the collateral. In the event of default by the Company under the Loan Agreement, the Company may be required to repay all amounts then outstanding under the Loan Agreement. As of December 31, 2020, the Company was in compliance with all covenants under the Loan Agreement.

As of December 31, 2020, the carrying value of the term loan consists of $25.0 million principal outstanding less the debt discount and issuance costs of approximately $2.1 million. The End of Term Fee of $1.6 million is treated as deferred financing costs, recognized over the life of the term loan and accreted to interest expense using the effective interest method. The debt issuance costs have been recorded as a debt discount which are being amortized to interest expense through the maturity date of the term loan.

Interest expense relating to the term loan, which is included in interest expense in the statements of operations and comprehensive loss, was $1.3 million for the year ended December 31, 2020.

Future principal payments for the long-term debt are as follows (in thousands):

	December 31, 2020
2021	$ —
2022	3,838
2023	12,272
2024	8,890
Total principal payments	25,000
End of term fee due at maturity in 2024	1,562
Total principal and end of term fee payments	26,562
Unamortized discount and debt issuance costs	(2,054)
Long-term debt, net	$ 24,508

9. Related Party Transactions

Recourse Notes

In October 2017, the Company issued two promissory notes to an executive officer for $1.6 million and $0.5 million, each with an interest rate of 1.85% per annum. The aggregate principal amount of $2.1 million was used to purchase 625,084 shares of restricted stock. The promissory notes were considered to be non-recourse in substance and accordingly, the shares sold subject to such promissory notes are considered to be an option for accounting purposes. In April 2018, the Company's board of directors approved the forgiveness of all outstanding principal and accrued interest of the $1.6 million non-recourse promissory note. The non-recourse promissory note outstanding of $0.5 million was repaid on April 4, 2018 in accordance with the terms of the note. The forgiveness of the promissory note was accounted for as a modification of a share-based payment. The Company recorded an incremental charge of $1.5 million related to the modification for the year ended December 31, 2018.

In January 2018, the Company issued full-recourse promissory notes to an executive and an executive officer of the Company for an aggregate principal amount of $0.4 million with an interest rate of 2.5% per annum. All of the principal was used to early exercise options for 114,406 shares of the Company's common stock. The full recourse note of $0.2 million for the executive officer was repaid on April 4, 2018 in accordance with the terms of the note. In December 2019, the full recourse note to an executive was deemed satisfied and superseded by a new full recourse promissory note agreement with a principal amount of $0.2 million and an interest rate of 1.51% per annum. At December 31, 2020, $0.2 million was recorded on the balance sheet in stockholders' equity related to the executive's full recourse promissory note agreement.

10. Common and Preferred Stock

The Company has 10,000,000 shares of convertible preferred stock authorized for issuance, par value of $0.0001 per share. As of December 31, 2020 and 2019, no shares of preferred stock were issued and outstanding. In connection with the Company's IPO, all outstanding shares of convertible preferred stock were automatically converted into 32,073,149 shares of common stock.

The Company has 300,000,000 shares of common stock authorized for issuance, par value of $0.0001 per share. Holders of the Company's common stock are entitled to one vote per share. As of December 31, 2020 and 2019, there were 53,253,213 and 47,227,065 shares of common stock issued and outstanding.

Preferred Stock Offering

In March 2018, the Company amended and restated its certificate of incorporation to, among other things, (i) increase its authorized shares of common stock from 122,000,000 to 140,000,000 shares, (ii) increase its authorized shares of preferred stock from 91,739,149 to 103,283,818 shares, of which 11,544,669 shares were designated as Series C convertible preferred stock, and (iii) set forth the rights, preferences and privileges of the Series C convertible preferred stock. In March 2018, the Company sold 3,590,573 shares of Series C convertible preferred stock at $15.3317 per share for net proceeds of $54.9 million and in April 2018, the Company sold an additional 322,852 shares of Series C convertible preferred stock $15.3317 per share for net proceeds of $5.0 million.

Initial Public Offering

On May 7, 2018, the Company closed its initial public offering ("IPO"), of 5,000,000 shares of common stock, at an offering price to the public of $17.00 per share. The Company received net proceeds of approximately $75.9 million, after deducting underwriting discounts, commissions and offering related transaction costs of approximately $9.1 million. In connection with the IPO, all of the Company's outstanding shares of convertible preferred stock were automatically converted into 32,073,149 shares of common stock. In addition, all of the Company's convertible preferred stock warrants were converted into warrants to purchase shares of common stock.

In connection with the completion of its IPO, on May 7, 2018, the Company's certificate of incorporation was amended and restated to provide for 300,000,000 authorized shares of common stock with a par value of $0.0001 per share and 10,000,000 authorized shares of preferred stock with a par value of $0.0001 per share.

At-the-Market Offerings

In June 2019, the Company filed a Registration Statement on Form S-3 (the "Shelf Registration Statement"), covering the offering of up to $250.0 million of common stock, preferred stock, debt securities, warrants and units. The Shelf Registration Statement included a prospectus covering the offering, issuance and sale of up to $75.0 million of the Company's common stock from time to time through an "at-the-market" offering under the Securities Act of 1933, as amended (the "ATM Offering Program"). The SEC declared the Shelf Registration Statement effective on June 6, 2019.

In June 2019, the Company also entered into a sales agreement (the "June 2019 Sales Agreement") with Cowen and Company, LLC ("Cowen") to sell shares of the Company's common stock, from time to time, with aggregate gross sales proceeds of up to $75.0 million, through the ATM Offering Program under which Cowen acts as its sales agent. Cowen is entitled to compensation for its services equal to up to 3.0% of the gross proceeds of any shares of common stock sold through Cowen under the June 2019 Sales Agreement. During the year ended December 31, 2020, the Company issued and sold 5,002,257 shares of its common stock through its ATM Offering Program and received net proceeds of approximately $37.3 million, after deducting commissions and other offering expenses of $1.3 million.

In July 2020, the Company filed an additional prospectus supplement to the Shelf Registration Statement. This prospectus supplement covers the offering, issuance and sale of up to an additional $50.0 million of the Company's common stock from time to time through an additional "at-the-market" offering under the Securities Act of 1933, as amended (the "Additional ATM Offering Program").

In July 2020, the Company entered into a second sales agreement (the "July 2020 Sales Agreement") with Cowen to sell shares of the Company's common stock, from time to time, with aggregate gross sales proceeds of up to $50.0 million, through the Additional ATM Offering Program under which Cowen will act as its sales agent. The issuance

and sale of shares of common stock by the Company pursuant to the July 2020 Sales Agreement are also deemed an "at-the-market" offering under the Securities Act of 1933, as amended (the "Securities Act"). Cowen is entitled to compensation for its services equal to up to 3.0% of the gross proceeds of any shares of common stock sold through Cowen under the July 2020 Sales Agreement. During the third and fourth quarters of 2020, there were no shares of the Company's common stock sold through the Additional ATM Offering Program.

11. Corporate Restructuring

In September 2020, the Company's board of directors implemented a corporate restructuring to align its resources on cellular senescence programs in ophthalmology and neurology while further extending operating capital. The restructuring resulted in an elimination of approximately 33 positions, or approximately 32% of the Company's workforce, as of September 30, 2020. The Company incurred a one-time employee benefits and severance charge of approximately $1.8 million in operating expenses during the year ended December 31, 2020. The related accrual is recorded in accrued compensation on the balance sheet at December 31, 2020. Restructuring charges incurred under this plan primarily consisted of employee termination benefits. Employee termination benefits include severance costs, employee-related benefits, and supplemental one-time termination payments. Charges and other costs related to the workforce reduction and structure realignment, and non-cash share-based compensation credits related to the forfeiture of stock options are included in operating expenses in the statements of operations and comprehensive loss. Of the total charge, $1.5 million was recorded to research and development expenses and $0.3 million was recorded to general and administrative expenses during the year ended December 31, 2020. Substantially all cash payments are expected to be paid out by the first quarter of 2021. The Company may also incur additional costs not currently contemplated due to events that may occur as a result of, or that are associated with, the restructuring.

12. Stock-Based Compensation

Summary of Equity Incentive Plans

In March 2018, the Company's board of directors adopted the Company's 2018 Incentive Award Plan (the "2018 Plan"). The 2018 Plan was approved by the Company's stockholders in April 2018 and became effective in May 2018. The 2018 Plan initially reserved 4,289,936 shares for the issuance of stock options as well as any automatic annual increases in the number of shares of common stock reserved for future issuance under the 2018 Plan. Awards granted under the 2018 Plan expire no later than ten years from the date of grant. For stock options, the option price shall not be less than 100% of the estimated fair value on the day of grant. Options granted typically vest over a four-year period but may be granted with different vesting terms. Unvested options not exercised at the time of an employee's termination of employment are added back to the 2018 Plan.

Following the Company's IPO and in connection with the effectiveness of the 2018 Plan, the 2013 Equity Incentive Plan (the "2013 Plan") terminated and no further awards will be granted under that plan. All outstanding awards under the 2013 Plan will continue to be governed by their existing terms and the shares that remained outstanding for issuance under the 2013 Plan were transferred into the 2018 Plan. As of December 31, 2020, there was an aggregate 12,001,501 shares of common stock authorized for issuance under the 2018 Plan.

Prior to its termination, the 2013 Plan provided for the granting of incentive stock options ("ISOs"), non-statutory stock options ("NSOs") and restricted shares to employees, directors, and consultants at the discretion of management and the board of directors. The exercise price of an ISO and NSO shall not be less than 100% of the estimated fair value of the shares on the date of grant, and the exercise price of an ISO and NSO granted to a 10% stockholder shall not be less than 110% of the estimated fair value of the shares on the date of grant. For awards granted between September 2017 and February 2018 with an exercise price of $3.42, a deemed fair value ranging from $3.95 to $8.47 per share was used in calculating stock-based compensation expense, which was determined using management hindsight. Options granted under the 2013 Plan expire no later than 10 years from the date of grant and generally vest over a four-year period but may be granted with different vesting terms. Unvested options not exercised at the time of an employee's termination of employment are added back to the 2018 Plan.

Under the 2013 Plan, the Company permitted early exercise of certain stock options prior to vesting. These unvested shares are subject to repurchase by the Company at the original issuance price in the event the optionee's employment is terminated either voluntarily or involuntarily. The amounts paid for shares purchased under an early exercise of stock options and subject to repurchase by the Company are reported as a liability and reclassified into additional paid-in capital as the shares vest.

In March 2020, the Company's board of directors approved the Company's 2020 Employment Inducement Incentive Plan ("the 2020 Plan"), to provide for grants to newly hired employees as a material inducement for them to commence employment with the Company. The 2020 Plan initially reserved 1,100,000 shares for the issuance of stock options, and in November 2020, the Company reserved an additional 1,500,000 shares of common stock for future issuance under the 2020 Plan. Awards granted under the 2020 Plan expire no later than ten years from the date of grant. For stock options, the option price shall not be less than 100% of the estimated fair value on the day of grant. Options granted typically vest over a four-year period but may be granted with different vesting terms. Unvested options not exercised at the time of an employee's termination of employment are added back to the 2020 Plan. As of December 31, 2020, there was an aggregate 2,570,000 shares of common stock authorized for issuance under the 2020 Plan.

Equity Incentive Plan Activity

The following sections summarize activity under the Company's equity incentive plans.

Stock Options, Restricted Stock Units (RSUs) and Performance Stock Units ("PSUs") Activity

A summary of the Company's stock option activity under the 2013 Plan, 2018 Plan and 2020 Plan for the year ended December 31, 2020 is as follows:

	Shares Available for Grant	Outstanding Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contract Term (in Years)	Aggregate Intrinsic Value (in thousands)
Balance at December 31, 2019	2,916,320	6,906,898	$ 7.62		
Shares added	5,587,088	—	—		
Granted	(7,887,420)	4,236,256	6.37		
Exercised	—	(308,484)	3.78		
Canceled	3,654,776	(3,359,198)	8.04		
Balance at December 31, 2020	4,270,764	7,475,472	$ 6.88	6.8	$ 5,261
Vested and exercisable at December 31, 2020		3,925,216	$ 6.87	5.1	$ 4,086
Vested and expected to vest at December 31, 2020		7,475,472	$ 6.88	6.8	$ 5,261

The total intrinsic value of options exercised was $1.5 million, $5.8 million and $1.5 million for the years ended December 31, 2020, 2019 and 2018, respectively. The weighted-average estimated fair value of stock options granted was $4.83, $7.12 and $13.20 for the years ended December 31, 2020, 2019 and 2018, respectively.

The aggregate intrinsic value of options exercisable was $4.1 million and $7.3 million as of December 31, 2020 and 2019, respectively.

In September 2020, the board of directors granted retention stock-based awards to employees covering an aggregate of 3.2 million shares of common stock, including options to purchase an aggregate of 250,000 shares of common stock and 2,959,850 of restricted stock units. The awards are all time-based vesting and vest over three to four years.

During the year ended December 31, 2020 the Company issued 13,550 shares in settlement of stock-based compensation awards accounted for as liability awards.

The following table summarizes the Company's RSU, RSA and PSU activity for the year ended December 31, 2020.

	Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2019	325,887	$ 9.00
Granted	3,651,164	$ 3.44
Released	(133,020)	$ 9.00
Canceled	(921,954)	$ 4.77
Unvested at December 31, 2020	2,922,077	$ 3.44

As of December 31, 2020, the total stock-based compensation cost related to options, RSUs and PSUs granted but not yet amortized was $25.1 million and will be recognized over a weighted-average period of approximately 3.3 years. The total grant date fair value of RSUs and RSAs vested during the year ended December 31, 2020 was approximately $1.2 million. No RSUs or RSAs vested during 2019 and 2018.

In March 2020, the board of directors granted the Company's newly hired Chief Executive Officer stock-based awards covering an aggregate of 1.1 million shares of common stock, including options to purchase an aggregate of 800,000 shares of common stock, 120,000 RSUs, 150,000 PSUs and 30,000 shares of common stock. The stock-based awards were granted pursuant to the 2020 Plan. See Note 16, "Subsequent Events".

The 30,000 shares of common stock were fully vested on the date of grant and thus, the related compensation expense of $0.2 million was recognized on the grant date. The stock options and RSUs will vest subject to continued service through the applicable vesting date.

Valuation of Stock Options

The Company uses the Black-Scholes option-pricing model for determining the estimated fair value and stock-based compensation related to stock options and ESPP awards. The fair value of stock options granted to employees was estimated on the date of grant using the Black-Scholes option pricing model using the following assumptions:

	Year Ended December 31,		
	2020	2019	2018
Expected term of options (in years)	6.1	6.1	6.1
Expected stock price volatility	92.6%-107.9%	99.4%-111.3%	87.4%-92.6%
Risk-free interest rate	0.29%-0.52%	1.59%-2.27%	2.6%-3.0%
Expected dividend yield	—	—	—

The valuation assumptions were determined as follows:

Expected Term—The expected term represents the period that the options granted are expected to be outstanding and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term).

Expected Volatility—The Company used an average historical stock price volatility based on a combined weighted average of the Company's historical average volatility and that of a selected peer group of comparable public companies within the biotechnology and pharmaceutical industry that were deemed to be representative of future stock price trends as the Company does not have a sufficient historical trading history of its own common stock. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available.

Risk-Free Interest Rate—The Company based the risk-free interest rate over the expected term of the options based on the constant maturity rate of U.S. Treasury securities with similar maturities as of the date of the grant.

Expected Dividend Yield—The Company has never paid any dividends and does not plan to pay dividends in the foreseeable future. Therefore, the expected dividend yield is zero.

The fair value of ESPP awards was not material for all periods presented.

Performance Stock Units

The PSUs granted in March 2020 vest as to 50,000 PSUs upon the attainment of (a) a volume-weighted average per share closing trading price of the Company's common stock of at least $36.875 over a trailing 30-day period or (b) a change in control transaction in which the price per share to the holders of the Company's common stock is at least $36.875 and as to 100,000 PSUs (x) at such time as the Company's market capitalization reaches at least $2.5 billion, as measured based on the volume weighted-average closing trading price over a trailing 30 day period or (y) a change in control transaction in which the consideration paid to the Company's stockholders is equal to at least $2.5 billion, as determined by the Company's board of directors.

For the PSU awards, the Company used the Monte-Carlo option pricing model to determine the fair value of awards at the date of grant. The Monte-Carlo option pricing model uses similar input assumptions as the Black-Scholes model; however, it further incorporates into the fair-value determination the possibility that the market condition may not be satisfied. Compensation costs related to awards with a market-based condition are recognized regardless of whether the market condition is ultimately satisfied. Compensation cost is not reversed if the achievement of the market condition does not occur. The total grant date fair value of the PSU awards was determined to be $0.7 million and will be recognized as compensation expense over the weighted-average derived service period of approximately 4.3 years.

Performance Contingent Stock Options

During the year ended December 31, 2018, the board of directors granted performance contingent stock option awards exercisable for 53,575 shares, to certain members of the Company's executive team. These awards had a weighted average exercise price of $3.42 which was based on the fair market value on the grant date, as determined by the board of directors, and vest upon the successful achievement of one or more specified performance goals.

The total estimated fair value of these awards was $0.4 million at the date of grant and was estimated using a Black-Scholes option-pricing model using the same assumptions as the stock options granted to employees with service-based vesting conditions.

As of December 31, 2019, there were 329,499 total performance contingent stock option awards outstanding with a total grant date fair value of $0.7 million. During the year ended December 31, 2019, the Company determined that the achievement of the requisite performance conditions was probable and, as a result, compensation cost of $0.7 million was recognized for these awards. These awards vested during the third quarter of 2019. As of December 31, 2020, the 329,499 performance contingent stock option awards are still outstanding.

Performance and Market Contingent Stock Options

During the year ended December 31, 2018, the board of directors granted performance and market contingent stock option awards exercisable for 160,727 shares of common stock to certain members of the Company's executive team. These awards had a weighted average exercise price of $3.42, which was based on the fair market value on the grant date, as determined by the board of directors. The total estimated grant-date fair value of these options was $1.0 million. Key assumptions in the valuation model included expected volatility, a risk-free interest rate, expected dividend yield, and an expected term unique to the terms of these awards.

Under the performance and market contingent awards, 53,575 of the shares have three separate market triggers for vesting based upon (i) the closing of a financing where the Company sells shares of its equity securities to institutional investors at a minimum price per share, (ii) a change in control with aggregate proceeds payable for the Company's common stock at a minimum price per share, or (iii) an initial public offering that becomes effective at a minimum specified price per share. The remaining 107,152 shares have three separate market triggers for vesting based upon (i) the closing of a financing where the Company sells shares of its equity securities to institutional investors at a minimum pre-money valuation, (ii) a change in control with minimum aggregate proceeds payable for the Company's common stock at a minimum price per share, or (iii) either an initial public offering or an achievement of a minimum market capitalization, as measured by a trailing 30 day volume-weighted average price.

By definition, the market condition in these awards can only be achieved after the performance condition of a liquidity event has been achieved. As such, the requisite service period is based on the estimated period over which the market condition can be achieved. When a performance goal is deemed to be probable of achievement, which for

liquidity events is generally upon achievement, time-based vesting and recognition of stock-based compensation expense commence.

As of December 31, 2020 and 2019, there were 87,521 and 454,584 performance and market contingent stock option awards outstanding with a grant date total fair value of $0.3 million and $1.5 million, respectively. As of December 31, 2020 and 2019, the Company determined that the achievement of the requisite performance conditions was not probable and, as a result, no compensation cost was recognized for these awards.

2018 Employee Stock Purchase Plan

In March 2018, the Company's board of directors adopted the Company's 2018 Employee Stock Purchase Plan (the "2018 ESPP"). The 2018 ESPP was approved by the Company's stockholders in April 2018 and became effective on May 2, 2018. The 2018 ESPP reserved 536,242 shares of common stock for issuance pursuant to future awards, as well as any automatic increases in the number of shares of the Company's common stock reserved for future issuance under this plan.

Under the 2018 ESPP, employees are offered the option to purchase the Company's common stock at a discount during the offering periods, at semi-annual intervals, with their accumulated payroll deductions. The option purchase price will be 85% of the lower of the closing trading price per share at the beginning of the offering period or at the purchase date. The 2018 ESPP provides for consecutive offering periods and eligible employees may elect to withhold up to 15% of their compensation through payroll deductions during the offering period for the purchase of stock. The maximum number of shares that may be purchased by any one participant is limited to 15,000 shares in each offering period and $25,000 in fair market value during any calendar year per the Internal Revenue Code limits. The first offering period commenced on September 16, 2018.

Stock-Based Compensation Expense

The following table sets forth the total stock-based compensation expense and costs associated with the Company's 2018 ESPP included in the Company's statement of operations (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Research and development	$ 6,563	$ 4,979	$ 6,043
General and administrative	7,250	5,873	3,398
Total	$ 13,813	$ 10,852	$ 9,441

Stock-based compensation for the year ended December 31, 2020 includes $0.1 million of expense related to awards accounted for as liability awards.

During the years ended December 31, 2020 and 2019, stock-based compensation expense recognized related to nonemployee options was $0.3 million and $0.4 million, respectively.

13. Net Loss per Common Share

Basic net loss per share is calculated by dividing net loss by the weighted average number of shares outstanding for the period. Diluted net loss per share is calculated by dividing net loss by the weighted average number of shares of common stock and potential dilutive common stock equivalents outstanding during the period if the effect is dilutive.

The calculation of diluted earnings (loss) per share also requires that, to the extent contingencies are satisfied during the period and the presumed issuance of additional shares as contingent consideration is dilutive to earnings (loss) per share for the period, adjustments to net income or net loss used in the calculation are required to remove the change in fair value of the contingent consideration liability for the period. Likewise, adjustments to the denominator are required to reflect the related dilutive shares. In all periods presented, the Company's outstanding stock options, RSUs (including PSUs), early exercised common stock subject to future vesting, restricted stock accounted for as options, shares subject to the 2018 ESPP and presumed issuance of additional shares as contingent consideration were excluded from the calculation of diluted net loss per share because their effects were antidilutive.

A reconciliation of the numerators and denominators used in computing net loss from continuing operations per share is as follows (in thousands, except per share amounts):

	December 31,		
	2020	2019	2018
	(in thousands, except share and per share amounts)		
Numerator:			
Net loss	$ (93,844)	$ (82,177)	$ (76,398)
Denominator:			
Weighted average number of shares outstanding—basic and diluted	50,864,889	43,624,807	28,269,907
Net loss per share—basic and diluted	$ (1.84)	$ (1.88)	$ (2.70)

Since the Company was in a loss position for all periods presented, basic net loss per common share is the same as diluted net loss per common share as the inclusion of all potential common shares outstanding would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

	Year Ended December 31,		
	2020	2019	2018
Options to purchase common stock	7,540,472	6,906,898	5,500,531
Early exercised common stock subject to future vesting	66,741	146,915	704,028
Restricted stock accounted for as options	—	—	359,228
RSUs	2,832,077	325,887	—
PSUs	150,000	—	—
Shares subject to the 2018 ESPP	111,383	47,597	27,622
Total	10,700,673	7,427,297	6,591,409

Up to 89,900 shares may be contingently issued, if certain performance conditions are met under the Company's in-licensing agreements. See Note 5, "License Agreements and Strategic Investment," to the Company's financial statements for additional information.

14. Defined Contribution Plan

The Company sponsors a 401(k) Plan that stipulates that eligible employees can elect to contribute to the 401(k) Plan, subject to certain limitations, on a pretax basis. In January 2019, the Company began to match 4% of employees' salary. During the years ended December 31, 2020 and 2019, the Company recorded matching contributions of $0.6 million and $0.8 million, respectively.

15. Income Taxes

The Company has incurred net operating losses for all the periods presented. The Company has not reflected the benefit of any such net operating loss carryforwards in the accompanying financial statements. The Company has established a full valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets. All losses to date have been incurred domestically as the Company has no international operations or subsidiaries.

No provision for U.S. income taxes exists due to tax losses incurred in all periods presented. All losses incurred were U.S. based.

The effective tax rate for the years ended December 31, 2020, 2019 and 2018 is different from the federal statutory rate primarily due to the valuation allowance against deferred tax assets as a result of insufficient sources of income. The effective tax rate of the Company's provision for income taxes differs from the federal statutory rate as follows:

	Year Ended December 31,		
	2020	2019	2018
Taxes at the U.S. statutory income tax rate	21.0 %	21.0 %	21.0 %
State tax, net of federal benefit	—	(2.2)	0.9
Other	0.9	(0.9)	(0.1)
Stock-based compensation	(0.7)	(0.5)	0.3
Research and development tax credits	2.2	(0.2)	1.0
Reduction to state net operating losses	0.1	(3.9)	—
Change in valuation allowance	(23.5)	(13.3)	(23.1)
Total provision for income taxes	— %	— %	— %

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards.

The tax effects of significant items comprising the Company's deferred income taxes are as follows:

	December 31,	
	2020	2019
	(in thousands)	
Deferred tax assets:		
Federal and state operating loss carryforwards	$ 57,126	$ 40,435
Research and development tax credits	5,411	3,436
Stock-based compensation	4,326	3,514
Accruals and other	1,145	1,232
Intangibles	1,181	241
Contingent consideration	—	670
Charitable contributions	254	253
Operating lease liabilities	8,203	—
Total deferred tax assets	77,646	49,781
Deferred tax liabilities:		
Operating lease right-of-use assets	(4,946)	—
Fixed assets	(1,750)	—
Unrealized gain on equity investment	—	(947)
Total deferred tax liabilities	(6,696)	(947)
Valuation allowance	(70,950)	(48,834)
Net deferred tax assets	$ —	$ —

The tax benefit of net operating losses, temporary differences and credit carryforwards should be recorded as an asset to the extent that management assesses that their realization is "more likely than not." Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carryforward period. Because of the Company's recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance.

Realization of the net deferred tax assets is dependent upon future taxable income, if any, the amount and timing of which is uncertain. Based on the weight of available positive and negative objective evidence, management believes it more likely than not that the Company's deferred tax assets are not realizable. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by $22.1 million and $11.0 million during the years ended December 31, 2020 and 2019, respectively.

Net operating losses and tax credit carryforwards as of December 31, 2020 are as follows:

	Amount (in thousands)	Expiration Years
Net operating losses, federal (post December 31, 2017)	$ 207,752	Do Not Expire
Net operating losses, federal (pre January 1, 2018)	64,136	2029-2037
Net operating losses, state	26,589	2029-2036
Research and development tax credits, federal	5,874	2034-2040
Research and development tax credits, state	4,949	Indefinite

Federal and state laws impose restrictions on the utilization of net operating loss carryforwards and R&D credit carryforwards in the event of a change in ownership of the Company, which constitutes an 'ownership change' as defined by Internal Revenue Code Section 382 and 383. The Company experienced an ownership change in the past that impacts the availability of its net operating losses and tax credits. The amounts indicated in the above tables reflect the reduction of net operating losses and credit carryforwards as a result of previous ownership changes that the Company experienced. Should there be additional ownership changes in the future, the Company's ability to utilize existing carryforwards could be substantially restricted.

The Company determines its uncertain tax positions based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings is more likely than not to be sustained upon examination by the relevant income tax authorities.

The following table summarizes the activity related to the Company’s unrecognized tax benefits:

	December 31,	
	2020	2019
	(in thousands)	
Gross unrecognized tax benefits at January 1	$ 9,762	$ 3,714
Additions for tax positions taken in the current year	255	6,221
Reductions for tax positions taken in the prior year	(2,875)	(173)
Gross unrecognized tax benefits at December 31	$ 7,142	$ 9,762

If recognized, none of the unrecognized tax benefits as of December 31, 2020 and 2019 would reduce the annual effective tax rate, primarily due to corresponding adjustments to the valuation allowance. The Company will recognize both accrued interest and penalties related to unrecognized benefits in income tax expense. As of December 31, 2020 and 2019, no liability has been recorded for potential interest or penalties. The Company does not expect the unrecognized tax benefits to change significantly over the next 12 months.

The Company files income tax returns in the U.S. federal jurisdiction and California and Colorado. The Company is not currently under audit by the Internal Revenue Service or other similar state or local authorities. All tax years remain open to examination by major taxing jurisdictions to which the Company is subject.

16. Subsequent Events

In January 2021, the board of directors granted the Company’s Chief Executive Officer stock-based awards covering an aggregate of 400,000 shares of common stock, including options to purchase an aggregate of 150,000 shares of common stock and 250,000 RSUs. The stock-based awards were granted pursuant to the 2018 Plan. During the first quarter of 2021, the board of directors granted to new executives an additional 580,000 options to purchase common stock. These stock-based awards were granted pursuant to the 2020 Plan. The stock options and RSUs will vest subject to continued service through the applicable vesting dates.

Subsequent to the year ended December 31, 2020, the Company has issued and sold 1,187,068 shares of its common stock through its ATM Offering Program and received net proceeds of approximately $8.7 million, after deducting commissions and other offering expenses of $0.3 million. The Company also issued and sold 33,561 shares of its common stock through its Additional ATM Offering Program and received net proceeds of approximately $0.3 million, after deducting commissions and other offering expenses of $8,500.

17. Selected Quarterly Financial Data (Unaudited)

The following tables show a summary of the Company's quarterly financial information for each of the four quarters of 2020 and 2019 and have been prepared in accordance with GAAP for interim financial reporting (in thousands, except for per share data):

	Quarter			
Year Ended December 31, 2020	**First**	**Second**	**Third**	**Fourth**
Loss from operations	$ (27,156)	$ (23,349)	$ (24,642)	$ (18,783)
Net loss	$ (28,038)	$ (18,667)	$ (27,552)	$ (19,587)
Net loss per common share, basic and diluted	$ (0.59)	$ (0.38)	$ (0.52)	$ (0.37)

	Quarter			
Year Ended December 31, 2019	**First**	**Second**	**Third**	**Fourth**
Loss from operations	$ (19,737)	$ (24,470)	$ (22,354)	$ (23,090)
Net loss	$ (18,767)	$ (23,673)	$ (21,710)	$ (18,027)
Net loss per common share, basic and diluted	$ (0.44)	$ (0.56)	$ (0.51)	$ (0.39)

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive and financial officers, evaluated the effectiveness of our disclosures controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of December 31, 2020. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2020, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at a reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States and includes those policies and procedures that:

- Pertain to the maintenance of records that accurately and fairly reflect in reasonable detail the transactions and dispositions of the assets of our company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- Provide reasonable assurances regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material adverse effect on our financial statements.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2020. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013 framework). Based on our assessment, management concluded our internal control over financial reporting was effective as of December 31, 2020, based on the COSO criteria.

Attestation Report of the Registered Public Accounting Firm

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm due to an exemption established by the JOBS Act for "emerging growth companies."

Inherent Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Changes in Internal Control over Financial Reporting

Management determined that, as of December 31, 2020, there were no changes in our internal control over financial reporting that occurred during the fiscal quarter then ended that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information required by this Item is incorporated herein by reference to the sections titled “Executive Officers,” “Election of Directors,” “Corporate Governance” and “Section 16(a) Beneficial Ownership and Reporting Compliance” in our Definitive Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 11. Executive Compensation.

Information required by this Item is incorporated herein by reference to the section titled “Executive Compensation,” “Director Compensation” and “Corporate Governance” in our Definitive Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information required by this Item is incorporated herein by reference to the section titled “Security Ownership of Certain Beneficial Owners and Management” and “Equity Compensation Plan Information” in our Definitive Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Information required by this Item is incorporated herein by reference to the section titled “Certain Relationships and Related Party Transactions” and “Corporate Governance” in our Definitive Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 14. Principal Accounting Fees and Services.

Information required by this Item is incorporated herein by reference to the section titled “Ratification of Selection of Independent Registered Public Accounting Firm” in our Definitive Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this report:

1. Financial Statements

See Index to Financial Statements in Part II Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules

All schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

3. Exhibits

Exhibit Index

Exhibit Number	Description	Incorporated by Reference			Filed Herewith
		Form	Number	Filing Date	
1.1	Sales Agreement, dated July 31, 2020, by and between Unity Biotechnology, Inc. and Cowen and Company, LLC.	10-Q	1.1	7-31-20	
3.1	Amended and Restated Certificate of Incorporation of Unity Biotechnology, Inc.	8-K	3.1	5-7-18	
3.2	Amended and Restated Bylaws of Unity Biotechnology, Inc.	8-K	3.2	5-7-18	
4.1	Reference is made to exhibits 3.1 through 3.2.				
4.2	Form of Common Stock Certificate.	S-1	4.2	4-23-18	
4.3	Amended and Restated Investors' Rights Agreement, dated as of March 15, 2018, by and among Unity Biotechnology, Inc. and the investors party thereto.	S-1	4.3	4-5-18	
4.4	Description of Unity's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.	10-K	4.4	3-11-20	
10.1(a)	Lease Agreement, dated as of May 13, 2016, by and between Unity Biotechnology, Inc. and BMR-Bayshore Boulevard L.P.	S-1	10.1(a)	4-5-18	
10.1(b)	First Amendment to Lease Agreement, dated as of May 23, 2017, by and between Unity Biotechnology, Inc. and BMR-Bayshore Boulevard L.P.	S-1	10.1(b)	4-5-18	
10.2(a)	Space License Agreement, dated as of October 20, 2016, by and between Unity Biotechnology, Inc. and BMR-Bayshore Boulevard L.P.	S-1	10.2(a)	4-5-18	
10.2(b)	First Amendment to Space License Agreement, dated as of December 5, 2016, by and between Unity Biotechnology, Inc. and BMR-Bayshore Boulevard L.P.	S-1	10.2(b)	4-5-18	
10.2(c)	Second Amendment to Space License Agreement, dated as of January 30, 2017, by and between Unity Biotechnology, Inc. and BMR-Bayshore Boulevard L.P.	S-1	10.2(c)	4-5-18	
10.3(a)#	2013 Equity Incentive Plan.	S-1	10.3(a)	4-5-18	
10.3(b)#	Form of Stock Option Agreement under 2013 Equity Incentive Plan.	S-1	10.3(b)	4-5-18	
10.4(a)#	2018 Incentive Award Plan.	S-1	10.4(a)	4-23-18	
10.4(b)#	Form of Stock Option Grant Notice and Stock Option Agreement under the 2018 Incentive Award Plan.	S-1	10.4(b)	4-5-18	
10.4(c)#	Form of Restricted Stock Award Grant Notice and Restricted Stock Award Agreement under the 2018 Incentive Award Plan.	S-1	10.4(c)	4-5-18	
10.4(d)#	Form of Restricted Stock Unit Award Grant Notice and Restricted Stock Unit Award Agreement under the 2018 Incentive Award Plan.	S-1	10.4(d)	4-5-18	
10.5#	2018 Employee Stock Purchase Plan.	S-1	10.5	4-23-18	
10.6#	Amended and Restated Non-Employee Director Compensation Program (Effective January 1, 2019)	10-K	10.6	3-6-19	
10.7#	Form of Indemnification Agreement for directors and officers.	S-1	10.7	4-5-18	
10.8#	Employment Agreement, dated January 29, 2018, by and between Unity Biotechnology, Inc. and Keith R. Leonard Jr.	S-1	10.8	4-5-18	
10.9#	Employment Agreement, dated January 29, 2018, by and between Unity Biotechnology, Inc. and Nathaniel E. David.	S-1	10.9	4-5-18	
10.10#	Employment Agreement, dated January 29, 2018, by and between Unity Biotechnology, Inc. and Robert C. Goeltz II.	S-1	10.10	4-5-18	
10.11#	Employment Agreement, dated January 29, 2018, by and between Unity Biotechnology, Inc. and Jamie Dananberg.	S-1	10.11	4-5-18	
10.12#	Employment Agreement, dated January 29, 2018, by and between Unity Biotechnology, Inc. and Daniel G. Marquess.	S-1	10.12	4-5-18	

10.13#	Employment Agreement, dated January 29, 2018, by and between Unity Biotechnology, Inc. and Tamara L. Tompkins.	S-1	10.13	4-5-18	
10.14+	Compound Library and Option Agreement, dated as of February 2, 2016, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.				X
10.15+	APG1252 License Agreement, dated as of February 2, 2016, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.				X
10.16†	Research Services Agreement, dated as of February 2, 2016, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.	S-1	10.16	4-5-18	
10.17+	Amendment to APG1252 License Agreement, dated as of February 2, 2016, by and between Ascentage Pharma Group Corp. Ltd.				X
10.18+	Amendment to Compound Library and Option Agreement, dated as of February 2, 2016, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.				X
10.19(a)+	Exclusive License Agreement, dated as of June 28, 2013, by and between the Mayo Foundation for Medical Education and Research and Unity Biotechnology, Inc.				X
10.19(b)+	Amendment No. 1 to Exclusive License Agreement, dated as of September 10, 2014, by and between the Mayo Foundation for Medical Education and Research and Unity Biotechnology, Inc.				X
10.19(c)†	Amendment No. 2 to Exclusive License Agreement, dated as of November 17, 2014, by and between the Mayo Foundation for Medical Education and Research and Unity Biotechnology, Inc.	S-1	10.19(c)	4-23-18	
10.19(d)+	Amendment No. 3 to Exclusive License Agreement, dated as of May 5, 2015, by and between the Mayo Foundation for Medical Education and Research and Unity Biotechnology, Inc.				X
10.19(e)+	Amendment No. 4 to Exclusive License Agreement, dated as of September 15, 2016, by and between the Mayo Foundation for Medical Education and Research and Unity Biotechnology, Inc.				X
10.19(f)+	Addendum to Amendment No. 4 to Exclusive License Agreement, dated as of September 15, 2016, by and between the Mayo Foundation for Medical Education and Research and Unity Biotechnology, Inc.				X
10.19(g)+	Amendment No. 5 to Exclusive License Agreement, dated as of October 17, 2016, by and between the Mayo Foundation for Medical Education and Research and Unity Biotechnology, Inc.				X
10.20+	Amended and Restated License Agreement, dated as of January 27, 2017, by and between the Buck Institute for Research on Aging and Unity Biotechnology, Inc.				X
10.21+	License Agreement, dated as of November 3, 2016, by and between The Johns Hopkins University and Unity Biotechnology, Inc.				X
10.22††	License Agreement for APG1197, dated as of January 2, 2019, by and between Ascentage Pharma Group Corp. Ltd. And Unity Biotechnology, Inc.	10-K	10.22	3-6-19	
10.23	Lease Agreement, dated as of February 28, 2019, by and between Unity Biotechnology, Inc. and Bayside Area Development, LLC	10-K	10.23	3-6-19	

10.24††††	First Amendment to Compound License Agreement for APG1197, dated as of November 19, 2019, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.	8-K	10.1	11-25-19	
10.25†††	Second Amendment to APG1252 License Agreement, dated as of November 19, 2019, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.	10-K	10.25	3-11-20	
10.26††††	Second Amendment to Compound Library and Option Agreement, dated as of January 8, 2020, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.	10-K	10.26	3-11-20	
10.27#	Amendment to Employment Agreement, dated March 9, 2020, by and between Unity Biotechnology, Inc. and Nathaniel E. David.	10-K	10.27	3-11-20	
10.28#	Amendment to Employment Agreement, dated March 9, 2020, by and between Unity Biotechnology, Inc. and Robert C. Goeltz II.	10-K	10.28	3-11-20	
10.29#	Amendment to Employment Agreement, dated March 9, 2020, by and between Unity Biotechnology, Inc. and Jamie Dananberg.	10-K	10.29	3-11-20	
10.30#	Amendment to Employment Agreement, dated March 9, 2020, by and between Unity Biotechnology, Inc. and Daniel G. Marquess.	10-K	10.30	3-11-20	
10.31#	Amendment to Employment Agreement, dated March 9, 2020, by and between Unity Biotechnology, Inc. and Tamara L. Tompkins.	10-K	10.31	3-11-20	
10.32#	Employment Agreement, dated March 30, 2020, by and between Unity Biotechnology, Inc. and Anirvan Ghosh.	8-K	10.1	3-30-20	
10.33#	Amended and Restated Non-Employee Director Compensation Program (effective as of March 30, 2020)	10-Q	10.2	5-7-20	
10.34†††	Third Amendment to Compound License Agreement for APG-1197, dated June 29, 2020, by and between Ascentage Pharma Group Corp. Ltd. and Unity Biotechnology, Inc.	8-K	10.1	7-1-20	
10.35#	Employment Agreement, dated August 1, 2020, by and between Unity Biotechnology, Inc. and Lynne Sullivan.	10-Q	10.2	11-4-20	
10.36#	Amendment to Employment Agreement, dated September 1, 2020, by and between Unity Biotechnology, Inc. and Lynne Sullivan.	10-Q	10.3	11-4-20	
10.37†††	Loan and Security Agreement, dated August 3, 2020, between Unity Biotechnology, Inc. and Hercules Capital. Inc.	8-K	10.1	8-4-20	
10.38#	Transition and Separation Agreement, dated December 12, 2020, by and between Nathaniel David and Unity Biotechnology, Inc.				X
23.1	Consent of Independent Registered Public Accounting Firm				X
24.1	Power of Attorney. Reference is made to the signature page.				X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1**	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X

101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)	X

† Confidential treatment has been granted for certain information contained in this exhibit. Such information has been omitted and filed separately with the Securities and Exchange Commission.

†† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment filed separately with the Securities and Exchange Commission.

††† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to Regulation S-K, Item 601(b)(10). Such omitted information is not material and would likely cause competitive harm to the registrant if publicly disclosed.

†††† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to Regulation S-K, Item 601(b)(10). Such omitted information is not material and would likely cause competitive harm to the registrant if publicly disclosed. Additionally, schedules and attachments to this exhibit have been omitted pursuant to Regulation S-K, Item 601(a)(5).

+ Certain confidential portions of this exhibit have been omitted from this exhibit in accordance with Regulation S-K 601(b)(10). Exhibit being refiled upon expiration of confidential treatment previously granted by the SEC.

# Indicates management contract or compensatory plan.

** The certification attached as Exhibit 32.1 that accompanies this Annual Report on Form 10-K is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Unity Biotechnology, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized**.**

Unity Biotechnology, Inc.

Date: March 23, 2021

By: /s/ Anirvan Ghosh
Anirvan Ghosh, Ph.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Anirvan Ghosh, Alexander Nguyen, and Lynne Sullivan his or her true and lawful attorney-in-fact and agent, with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the U.S. Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or their, his or her substitutes or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
/s/ Anirvan Ghosh **Anirvan Ghosh, Ph.D.**	Chief Executive Officer and Director (Principal Executive Officer)	March 23, 2021
/s/ Lynne Sullivan **Lynne Sullivan**	Chief Financial Officer (Principal Financial and Accounting Officer)	March 23, 2021
/s/ Keith R. Leonard Jr. **Keith R. Leonard Jr.**	Chairman	March 23, 2021
/s/ Paul L. Berns **Paul L. Berns**	Director	March 23, 2021
/s/ Kristina M. Burow **Kristina M. Burow**	Director	March 23, 2021
/s/ Graham K. Cooper **Graham K. Cooper**	Director	March 23, 2021
/s/ Nathaniel E. David **Nathaniel E. David, Ph.D.**	Director	March 23, 2021
/s/ Gilmore O'Neill **Gilmore O'Neill, M.B.**	Director	March 23, 2021
/s/ Margo Roberts **Margo Roberts, Ph.D.**	Director	March 23, 2021
/s/ Camille D. Samuels **Camille D. Samuels**	Director	March 23, 2021

Exhibit 10.14

COMPOUND LIBRARY AND OPTION AGREEMENT

This Compound Library and Option Agreement (the "Agreement"), dated as of February 2nd, 2016 (the "Signing Date"), is made by and between **Ascentage Pharma Group Corp. Ltd.**, a Hong Kong corporation ("Ascentage"), with a business address at 11/F, AXA CENTRE, Gloucester Road, Wanchai, Hong Kong, and **Unity Biotechnology, Inc.**, a Delaware corporation ("Unity"), with a business address at 1700 Owens Street, Suite 535, San Francisco, California 95158. Ascentage and Unity are sometimes referred to herein as individually as a party and collectively as the parties.

BACKGROUND

A. Ascentage is in the business of developing and commercializing therapeutic agents for the treatment of cancer and related conditions;

B. Unity is in the business of developing and commercializing therapeutic agents intended to delay aging and treat age-related conditions;

C. Unity and Ascentage have entered into that certain license agreement (the "APG-1252 License Agreement") of even date herewith pursuant to which Unity obtained a license to commercialize that certain BCL-2/BCL-xL inhibitor known as "APG-1252" for treatment of age-related conditions.

D. Ascentage possesses a collection of additional BCL-2/BCL-xL inhibitor compounds, some of which may be useful in the treatment of age-related conditions;

E. Unity and Ascentage have entered into a research agreement of even date herewith pursuant to which Unity will fund research by Ascentage intended to discover additional BCL-2/BCL-xL inhibitor compounds;

F. Unity desires to obtain the right to screen Ascentage's collection of BCL-2/BCL-xL inhibitor compounds as well as any additional BCL-2/BCL-xL inhibitor compounds discovered by Ascentage during the term of this Agreement (including any such compounds discovered pursuant to the aforementioned research agreement) to identify compounds with potential utility in the treatment of age-related conditions other than Oncology Indications (as defined below);

G. Ascentage is willing to permit Unity to conduct the above described screening on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, it is agreed by and between the parties as follows:

ARTICLE 1
DEFINITIONS

As used herein, the following terms will have the meanings set forth below:

1.1 "Active Compound" means an Ascentage Active Compound or a Unity Active Compound, as applicable.

1.2 "Affiliate" means with respect to a particular party, another person that controls, is controlled by or is under common control with such party. For the purposes of the definition in this Section 1.2, the word "control" (including, with correlative meaning, the terms "controlled by" or "under the common control with") means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting stock of such entity, or by contract or otherwise.

1.3 "Ascentage Active Compound" means any Compound designated by Ascentage as an Active Compound in accordance with the Section 2.6.

1.4 "Ascentage Future Compounds" means any BCL-2/BCL-xL inhibitor compounds generated by or on behalf of Ascentage during the Term, but specifically excluding Unity Future Compounds.

1.5 "Ascentage Intellectual Property" means all Patents and Technology owned or Controlled by Ascentage or its Affiliates during the Term.

1.6 "Carved Out Indication" means any indication that is not an Oncology Indication and that [***] a compound that acts through the BCL-2 pathway to the [***] (e.g., [***]).

1.7 "Collaboration Period" means the period of time commencing on the Effective Date and continuing until expiration or earlier termination of the Research Agreement.

1.8 "Compounds" means (a) the Existing Compounds, (b) the Future Ascentage Compounds, and (iii) the Unity Compounds, and "Compound" means a single compound from any of the foregoing categories of compounds.

1.9 "Compound Information" means with respect to a given Compound, a brief summary of all material data readily available and known to Ascentage that relate to the biological activity of such Compound.

1.10 "Compound-Related Patents" means Patents within the Ascentage Intellectual Property that are directed to one or more Compounds.

1.11 "Compound Screening" has the meaning provided in Section 2.4.

1.12 "Control" and its correlative terms, "Controlled" or "Controls" shall mean, with respect to any Patent or item of Technology, that a Party or one of its Affiliates owns or possesses rights to such Patent or item of Technology sufficient to grant the access, license or sublicense

contemplated in this Agreement without violating the terms of any agreement or other arrangement with any Third Party.

1.13 "Effective Date" shall mean the date on which the Second Amendment takes effect.

1.14 "[***]" means the [***] to be negotiated by the parties pursuant to Section 4.2.3(c)(iv).

1.15 "Exclusive Evaluation Period" shall mean with respect to a given compound, the period commencing on the date of delivery of the New Compound Report disclosing such compound (and in the case of a Unity Compound, the [***]) and ending on the last day of the [***] following the [***] in which the Exclusive Evaluation Period commenced.

1.16 "Existing Compounds" means the [***] BCL-2/BCL-xL inhibitor compounds collectively comprising Ascentage's BCL-2/BCL-xL library as of the Effective Date, and includes the [***] BCL-2/BCL-xL inhibitor compounds previously provided to Unity by Ascentage for analysis under that certain Materials Transfer Agreement entered into by the parties on March 19, 2015 ("Prior Compounds"). Notwithstanding the foregoing, APG-1252 shall not be considered an Existing Compound for purposes of this Agreement.

1.17 "Grace Period" means a period of [***] ([***]) to [***] ([***]) [***] following the expiration or earlier termination of the Collaboration Period. The length of the Grace Period shall be determined based on the duration of the Collaboration Period in accordance with the following:

1.17.1 If the duration of the Collaboration Period is [***] but less than [***], the Grace Period shall be [***] ([***]) [***];

1.17.2 If the duration of the Collaboration Period is [***] but less than [***], the Grace Period shall be [***] ([***]) [***];

1.17.3 If the duration of the Collaboration Period is at least [***] but less than [***], the Grace Period shall be [***] ([***]) [***];

1.17.4 If the duration of the Collaboration Period is [***] or more, the Grace Period shall be [***] ([***]) [***].

1.18 "Greater China" means the People's Republic of China, Hong Kong, Macau and Taiwan.

1.19 "IND" means (a) an Investigational New Drug Application as defined in the United States Federal Food, Drug and Cosmetic Act, as revised, or (b) the equivalent application in any other regulatory jurisdiction outside of the United States of America, the filing of which is necessary to commence or conduct clinical testing of a pharmaceutical product in humans in such jurisdiction.

1.20 "Jiangsu Ascentage" means Jiangsu Ascentage Pharma Development Ltd. (□□□□□□□□□□□□□).

1.21 "JRC" or "Joint Research Committee" has the meaning set forth in Section 5.1.

1.22 "Library" means, at any point in time, the collection of Compounds then available for screening in accordance with the terms of this Agreement.

1.23 "Oncology Indications" means indications where [***].

1.24 "Patents" means the rights and interests in and to issued patents and pending patent applications in any country, including all provisional applications, substitutions, continuations, continuations-in-part, divisions, and renewals, all letters patent granted thereon, and all reissues, reexaminations and extensions thereof.

1.25 "Research Agreement" means that certain research agreement of even date herewith, a copy of which is attached as Exhibit 1.25.

1.26 "Senolytic Test" means the assay described in Exhibit 1.26, Part A hereto.

1.27 "Technology" means all inventions, discoveries, improvements, trade secrets and proprietary methods and materials, whether or not patentable, directly relating to one or more Compounds, in each case that is Controlled by Ascentage or its Affiliates during the term of this Agreement and is necessary or reasonably useful to Unity in exercising its rights or performing its obligations under this Agreement, including (a) methods of production or use of, Compounds and (b) data, formulations and techniques arising from the synthesis or characterization of Compounds.

1.28 "Third Party" means any person or entity other than Unity and Ascentage.

1.29 "UM License Agreement" means that certain license agreement entered into by Ascentage and the Regents of the University of Michigan ("UM") effective as of December 1, 2010, as amended by all amendments to such license agreement existing as of the Effective Date.

1.30 "Unity Active Compounds" means any Compound designated by Unity as an Active Compound in accordance with the Section 2.5.

1.31 "Unity Compounds" means the chemical compounds discovered or synthesized by (a) Ascentage pursuant to the Research Agreement and/or (b) [***] pursuant to the UM Sponsored Research Agreement (as further defined in Section 2.3.1 below).

ARTICLE 2
COMPOUND SELECTION AND EVALUATION

2.1 Objectives. The parties shall each have a right to screen the Library to identify Compounds of potential interest as further described in this Article 2.

2.2 Existing Compound Delivery.

2.2.1 Within [***] ([***]) business days following the Effective Date, Ascentage shall provide Unity with access to the Compound Information described in Section 1.9 for all Existing Compounds. In addition, together with such Compound Information Ascentage shall provide Unity with the chemical structure of all Existing Compounds, provided that Ascentage shall not be obligated to provide Unity with the structure of any Existing Compounds for which Patents have been not been filed until such time as Patents have been filed with respect to such Compounds. Ascentage agrees to provide Unity with periodic updates disclosing to Unity the structures of any Compounds for which Patents were recently filed.

2.2.2 Upon Unity's request, Ascentage shall supply to Unity at least [***] ([***]) [***] of each of the Existing Compounds requested by Unity, with each such Compound to be supplied in a formulation as described in Exhibit 2.2. Ascentage shall use its commercially reasonable efforts to ensure delivery of such newly synthesized Compounds within [***] ([***]) business days following the date when Ascentage receives Unity's written request. At the time of delivery of such Existing Compounds, Ascentage shall also provide Unity with any Compound Information for such Compounds not previously supplied to Unity pursuant to Section 2.2.1. Ascentage shall provide supplemental information regarding the Compounds as reasonably requested by Unity for use in Unity's screening and evaluation of the Compounds [***]. Notwithstanding the foregoing, the parties acknowledge that Ascentage has previously provided Unity with the Prior Compounds and that Ascentage's supply obligation under this Section 2.2.2 with respect to such Prior Compounds (other than with respect to Compound Information and chemical structures for such Prior Compounds not previously supplied to Unity) is deemed satisfied in full as of the Effective Date.

2.2.3 To the extent that Ascentage does not possess sufficient quantities of one or more Existing Compounds to provide Unity with at least [***] ([***]) [***] of the Existing Compound(s) requested by Unity under Section 2.2.2, Ascentage agrees to synthesize additional quantities of such Compound(s) for delivery to Unity and Unity shall reimburse Ascentage for such delivered Compound(s) at [***], which shall not exceed [***] Dollars ($[***]) per Compound without Unity's prior written approval. Ascentage shall [***] delivery of such newly synthesized Compounds within [***] ([***]) business days following the date when Ascentage receives Unity's written request. Notwithstanding the foregoing, in the event that Ascentage projects that [***] will exceed [***] Dollars ($[***]) and Unity does not agree to reimburse Ascentage for such additional projected costs, Ascentage shall not be obligated to supply Unity with the requested quantities of such Compound but shall at Unity's request [***] provide Unity or its designee with access and licenses to such Ascentage Intellectual Property as may be reasonably required to enable Unity or its designee to synthesize such Compound on its own, provided that Unity agrees that the licenses granted to it under this Section 2.2.3 shall: (a) be limited to the production of the named Compound(s) only, and (b) be limited to production of quantities of such Compound(s) of [***] or less.

2.3 Addition of Ascentage Future Compounds and Unity Compounds to the Library.

2.3.1 UM Sponsored Research Agreement. Unity agrees to provide a total of $[***] in funding over [***] years following the Effective Date to be used to fund the discovery of additional BCL-2/BCL-xL inhibitor compounds [***]. Promptly following the Effective Date, the parties shall agree upon and implement a strategy for providing such funding to UM through that certain research agreement entered into by Ascentage and UM effective as of September 24, 2013 ("UM SRA"), which strategy shall be based on the following principles: (a) the parties shall amend the UM SRA to (i) add a new Project Plan to accommodate such additional funding and (ii)ensure that the intellectual property generated by [***] in the performance of such new Project Plan is subject to the option described in Section 8.2 of the UM SRA, and (b) the parties shall agree upon and update the Research Agreement to include a process by which Ascentage shall exercise the option under Section 8.2 of the UM SRA with respect to inventions arising under the new Project Plan that Unity would like included within the Ascentage Intellectual Property for purposes of this Agreement and/or one or more Compound License Agreements.

2.3.2 Notification. Within [***] ([***]) business days after the end of each [***], Ascentage will supply to Unity a brief written report disclosing to Unity all Ascentage Future Compounds and Unity Compounds discovered by Ascentage [***] during the previous [***] ("New Compound Report"), such report to include the structure of each Compound disclosed therein and any additional information [***] available and known to Ascentage that [***] relates to such Compounds. Together with each such New Compound Report, Ascentage will supply to Unity at least [***] ([***]) [***] of each of the Unity Compounds disclosed in such report in a formulation as described in Exhibit 2.2 or as otherwise specified in the Research Agreement or UM Sponsored Research Agreement.

2.3.3 Addition to Library.

(a) Ascentage Future Compounds.

(i) During the Exclusive Evaluation Period, Ascentage shall have the exclusive right to assess the Ascentage Future Compounds disclosed in such report and to designate one or more of such Ascentage Future Compounds as Ascentage Active Compounds, with any such designations being made in accordance with the procedures described in Section 2.6 below.

(ii) Following the end of the Exclusive Evaluation Period, any Ascentage Future Compounds disclosed in the applicable New Compound Report shall thereafter be included within the Library and all such compounds that have not been designated as Ascentage Active Compounds shall thereafter be available for designation by either Party as an Active Compound in accordance with Sections 2.5 and 2.6 (as applicable). Upon addition of such

Ascentage Future Compounds to the Library, Ascentage will promptly supply to Unity at least [***] ([***]) [***] of each such Ascentage Future Compound for screening and evaluation purposes.

(b) Unity Compounds. During the Exclusive Evaluation Period following the Unity's receipt of a given New Compound Report, Unity shall have the exclusive right to assess the Unity Compounds disclosed in such report and to designate one or more of such Unity Compounds as Unity Active Compounds, with any such designations being made in accordance with the procedures described in Section 2.5 below. Following the end of the Exclusive Evaluation Period, any Unity Compounds disclosed in the applicable New Compound Report shall thereafter be included within the Library and all such compounds that have not been designated as Unity Active Compounds shall thereafter be available for designation by either Party as an Active Compound in accordance with Sections 2.5 and 2.6 (as applicable).

2.4 Compound Screening and Analysis. During the Term, Unity shall have the right to screen and evaluate the Compounds in the Library to identify Compounds with senolytic activity and potential therapeutic utility for the prophylaxis and treatment of, and palliation of symptoms associated with, indications other than Oncology Indications (collectively, "Compound Screening"). Should Unity identify through such Compound Screening Compounds in the Library of interest to Unity for which Patents have not been filed, upon Unity's request, Ascentage agrees to use commercially reasonable efforts to promptly file Patents with respect such Compounds and thereafter (or to allow Unity to do so at its expense in accordance with Section 7.2) shall disclose to Unity the chemical structure of such Compounds. For clarity, Unity expressly agrees that it shall use the Compounds and Compound Information transferred to Unity solely for the limited purposes of Compound Screening and the evaluation, development and optimization of Compounds in accordance with the terms of this Agreement and that the Compounds and Compound Information transferred to Unity shall not otherwise be used in conducting any screening or research aimed at identifying Compounds for use in the prophylaxis or treatment of Oncology Indications.

2.5 Designation of Active Compounds by Unity. Unity shall have the right to designate Compounds as Active Compounds, as set forth in this Section 2.5.

2.5.1 General.

(a) Existing Compounds. Commencing on the Effective Date and continuing for the duration of Term, Unity shall have the right to designate one or more Existing Compounds as Unity Active Compound, by providing Ascentage with written notice as described in Section 2.5.2(a) below and subject to the requirements of Section 2.5.2(b) below. Notwithstanding anything to the contrary in this Agreement, Unity acknowledges and agrees that the [***].

(b) Ascentage Future Compounds. Commencing on expiration of the Exclusive Evaluation Period for the applicable Ascentage Future Compound and continuing for the duration of Term, Unity may designate one or more Ascentage Future Compounds disclosed in such report as a Unity Active Compound by providing

Ascentage with written notice as described in 2.5.2(a) below and subject to the requirements of Section 2.5.2(b) below.

(c) Unity Compounds. Commencing on the date of Unity's receipt of any given New Compound Report and continuing for the duration of Term, Unity shall have the right to designate one or more Unity Compounds as Unity Active Compound, by providing Ascentage with written notice as described in Section 2.5.2(a) below and subject to the requirements of Section 2.5.2(b) below.

2.5.2 Designation Process and Requirements.

(a) Notice. To designate an Existing Compound, an Ascentage Future Compound or a Unity Compound as a Unity Active Compound, Unity shall so notify Ascentage of such selection in writing and provide Ascentage a description of the applicable Compound, including to the extent the chemical structure of the applicable Compound has been provided to Unity by Ascentage, its chemical structure.

(b) Additional Requirements. Each such designation shall be effective upon receipt by Ascentage provided that:

(i) The Compound to be designated as a Unity Active Compound is not currently a validly designated Ascentage Active Compound; and

(ii) The designation of such Compound as a Unity Active Compound does not bring the total number of Unity Active Compounds to more than fifteen (15).

2.6 Designation of Active Compounds by Ascentage.

2.6.1 General.

(a) Existing Compounds. Without prejudice to and acknowledging the designation of Ascentage Active Compounds as set forth in Section 2.5.1(a), commencing on the [***] ([***]) [***] anniversary of the Effective Date and continuing for the duration of Term, Ascentage shall have the right to designate one or more Existing Compounds as Ascentage Active Compounds, by providing Unity with written notice as described in Section 2.6.2(a) below and subject to the requirements of Section 2.6.2(b) below.

(b) Ascentage Future Compounds. Commencing on the date of Unity's receipt of any given New Compound Report and continuing for the duration of Term, Ascentage may designate one or more Ascentage Future Compounds disclosed in such report as an Ascentage Active Compound by providing Unity with written notice as described in 2.6.2(a) below and subject to the requirements of Section 2.6.2(b) below.

(c) Unity Compounds. Commencing on expiration of the Exclusive Evaluation Period for the applicable Unity Compound, Ascentage shall have the right to designate one or more Unity Compounds as Ascentage Active Compound, by providing Unity with written notice as described in Section 2.6.2(a) below and subject to the requirements of Section 2.6.2(b) below.

2.6.2 Designation Process and Requirements.

(a) Notice. To designate an Existing Compound, an Ascentage Future Compound or a Unity Compound as an Ascentage Active Compound, Ascentage shall so notify Unity of such selection in writing and provide Unity a description of the applicable Compound, including its chemical structure and a copy of results of the biochemical assay to be described in Exhibit 2.6.

(b) Additional Requirements. Each such designation shall be effective upon receipt by Unity provided that:

(i) The Compound to be designated as an Ascentage Active Compound is not currently a validly designated Unity Active Compound; and

(ii) The designation of such Compound as an Ascentage Active Compound does not bring the total number of Ascentage Active Compounds to more than fifteen (15).

2.7 Maximum Number of Active Compounds; Release of Active Compounds.

2.7.1 Maximum Number of Active Compounds. The maximum number of Compounds that may be designated by a Party as Active Compounds at any one time is fifteen (15).

2.7.2 Release of Active Compounds. A Party may terminate its designation of any particular Active Compound at any time by so notifying the other Party in writing (specifying the Active Compound for which such designation is being terminated). From and after the date the other Party receives such notice of termination, the specified Compound shall cease to be an Active Compound for all purposes of this Agreement.

2.8 Technology Transfer. Within [***] ([***]) days of Unity's designation of a Compound as a Unity Active Compound, Ascentage shall provide access to Unity all necessary and [***] Technology [***] available to Ascentage with respect to such Compound.

2.9 Rejection of Compounds; Resupply of Compounds.

2.9.1 Rejection of Compounds for Non-Conformance. Unity may reject the delivery of any Compounds delivered pursuant to Section 2.2, 2.3.2, or 2.3.3(a)(ii) that fails to materially conform to the requirements of Exhibit 2.2, by written notice to Ascentage within [***] ([***]) days of delivery of such Compounds, accompanied by documentation of the non-conformance and any

original experimental data related thereto. In the event of any nonconformance under this paragraph, Ascentage shall have [***] ([***]) days to cure. Compounds that are not rejected by Unity within [***] ([***]) days after delivery shall be deemed accepted.

2.9.2 Resupply of Compounds. Unity shall have the right to manufacture or have manufactured additional quantities of Compounds already delivered pursuant to Section 2.2, 2.3.2, or 2.3.3(a)(ii), provided that at its election, Unity may obtain additional quantities of such Compounds by written order to Ascentage specifying the Compounds desired ("Re-supply Compounds") and provided further that Unity [***].

ARTICLE 3
DESIGNATION OF DEVELOPMENT CANDIDATES

3.1 General. In the event that either Party elects to advance a Compound into formal preclinical development, such Party shall first designate such Compound as a Development Candidate in accordance with the procedures set forth in this Article 3. For clarity, neither Party shall initiate GLP toxicity studies, nor carry out any subsequent preclinical or clinical development, with respect to any Compound, unless such Compound has been designated as a Development Candidate, and then only for so long as such Compound retains such designation (or in the case of Unity, only for so long as Unity retains its license to such Compound under a Compound License Agreement).

3.2 Requirements for Designation.

3.2.1 Eligibility. To be eligible for designation as a Development Candidate by a given Party, a Compound must be a validly designated Active Compound of such Party (all such eligible Compounds, hereinafter referred to as "Eligible Compounds").

3.2.2 Timing Requirements. Commencing on the Effective Date and continuing for the duration of Term, each Party shall have the right to designate one or more Eligible Compounds as Development Candidates, by providing the other Party with written notice as described in Section 3.3.1 below and subject to the other requirements of this Section 3.2.

3.2.3 Maximum Number of Development Candidates.

(a) Unity. The maximum number of Existing Compounds and Ascentage Future Compounds that may be designated as Unity Development Candidates at any one time is [***] ([***]), provided that Unity shall be entitled to designate an additional [***] ([***]) Existing Compounds and/or Ascentage Future Compounds as "Back-up Compounds" as described in Section 3.5 below. For clarity there shall be no limit on the number of Unity Compounds that Unity may designate as Unity Development Candidates.

(b) Ascentage. The maximum number of Unity Compounds that may be designated as Ascentage Development Candidates at any one time is [***] ([***]). For clarity there shall be no limit on the number of Existing Compounds and Ascentage Future Compounds that Ascentage may designate as Ascentage Development Candidates.

3.3 Designation of Development Candidates.

3.3.1 Notice. To designate an Eligible Compound as a Development Candidate, the Party making such designation shall notify the other Party of such designation in writing and provide the other Party a clear description of the applicable Eligible Compound, including its chemical structure.

3.3.2 Mechanics of Designation.

(a) Unity. As soon as practicable (and within [***] ([***]) days) after Unity 's designation of each Development Candidate in accordance with this Article 3), Unity and Ascentage shall complete and execute the form of Compound License Agreement set forth in Exhibit 3.3.2(a). To complete the form of Compound License Agreement, the Parties shall: (i) fill in the effective date of the Compound License Agreement with the date of the notice provided under Section 3.3.1 above; and (ii) specify the Eligible Compound being designated as Development Candidate. It is understood that once a notice of designation has been submitted in accordance with Section 3.3.1 above, then provided that such designation is otherwise compliant with the requirements of this Article 3, Ascentage shall be obligated to enter into a Compound License Agreement with respect to the applicable Eligible Compound. For clarity, the intent of the Parties is that each Development Candidate shall be the subject of a separate Compound License Agreement and that each Compound License Agreement shall apply to only a single Development Candidate.

(b) Ascentage. Notices of designation submitted by Ascentage in accordance with Section 3.3.1 above shall be effective upon receipt by Unity, provided that such designation is otherwise compliant with the requirements of this Article 3.

3.3.3 Termination of Development Candidate Status. A Party may terminate its designation of any particular Development Candidate at any time by so notifying the other Party in writing (specifying the Development Candidate for which such designation is being terminated), such notice in the case of a termination by Unity to take the form of a notice of termination under the Compound License Agreement for such Development Candidate. From and after the date the other Party receives such notice of termination, the specified Compound shall cease to be an Development Candidate for all purposes of this Agreement and shall be returned to the Library where it shall be available for selection as an Active Compound pursuant to Sections 2.5 and 2.6 (as applicable), provided that such terminated Development Candidate shall not be available for re-selection by the terminating Party as either an Active Compound or a Development Candidate for a period of [***]

([***]) [***] following the date notice of termination was provided to the non-terminating Party pursuant to this Section 3.3.3.

3.4 Diligence Requirements.

3.4.1 Unity. With respect to each Compound designated as a Development Candidate, Unity shall meet the diligence requirements set forth in the Compound License Agreement for such Development Candidate. In the event that Unity fails to meet such diligence requirements and fails to cure such default in accordance with the terms of such Compound License Agreement, Unity's right to continue to develop such Development Candidate will terminate, all as further described in such Compound License Agreement.

3.4.2 Ascentage. With respect to each Compound designated as a Development Compound, Ascentage shall meet the diligence requirements set forth in Exhibit 3.4.2. In the event that Ascentage fails to meet such diligence requirements and fails to cure such default accordance with Section 12.2, Ascentage's right to continue to develop such Development Candidate will terminate, Ascentage shall [***] discontinue ([***]) all development activities with respect to such Development Candidate.

3.5 Back-up Compounds.

3.5.1 Designation. At the time Unity designates a Development Candidate, Unity shall have the right to designate [***] Active Compound to be used to replace such Development Candidate in the event Unity elects to abandon development of such Development Candidate (each, a "Back-up Compound"), all as further specified in the applicable Compound License Agreements.

3.5.2 Exclusivity. Ascentage shall be free to conduct research with respect to the Back-up Compounds, provided that Ascentage hereby covenants that it shall not [***], nor shall it authorize any Third Party (including its Affiliates) to [***] with respect to any Back-up Compound until such time as such Back-up Compound is released in accordance with Section 3.5.3. For clarity, once a Back-up Compound has been released, such Compound shall be available for development and commercialization by Ascentage in accordance with the applicable terms of this Agreement.

3.5.3 Release of Back-up Compounds. A Back-up Compound shall be deemed to be released upon the first to occur of either of the following events: (a) the termination of the Compound License Agreement for the Development Compound with which such Back-up Compound is associated, or (b) the [***] anniversary of the [***] of the Development Compound with which such Back-up Compound is associated. For clarity, it is acknowledged that a condition of Unity's maintaining its license with respect to any given Development Compound is that Unity meet the diligence requirements set forth in the Compound

License Agreement for such Development Candidate. It is further acknowledged that in the event that Unity fails to meet such diligence requirements and fails to cure such default in accordance with the terms of such Compound License Agreement, Unity's right to continue to develop such Development Candidate will terminate, and any Back-up Compound associated with such Development Compound shall be released, all as further described in such Compound License Agreement.

ARTICLE 4
EXCLUSIVITY/RESTRICTIONS ON COMPOUND DEVELOPMENT

4.1 Unity.

4.1.1 No [***] of Ascentage Development Candidates. Unity hereby covenants that it shall not conduct, nor shall it authorize any Third Party (including its Affiliates) to conduct, any [***] with respect to any Compound that Ascentage has designated as a Development Candidate in accordance with the terms of Article 3 for so long as that Compound remains designated as an Ascentage Development Candidate (and in the case that [***]).

4.1.2 No Initiation of GLP Toxicology Studies without designation as a Development Candidate. Unity hereby covenants that it shall not initiate, nor shall it authorize any Third Party (including its Affiliates) to initiate, GLP toxicology studies (or any subsequent studies) with respect to any Compound which it has not designated as a Development Candidate in accordance with Article 3.

4.1.3 No Development for Oncology Indications. Unity hereby covenants that it shall not research or develop, nor shall it authorize any Third Party (including its Affiliates) to research or develop, any Compound for the diagnosis, prophylaxis, treatment or palliation of any Oncology Indications.

4.2 Ascentage.

4.2.1 No Initiation of GLP Toxicology Studies without designation as a Development Candidate. Ascentage hereby covenants that it shall not initiate, nor shall it authorize any Third Party (including its Affiliates) to initiate, GLP toxicology studies (or any subsequent studies) with respect to any Compound which it has not designated as a Development Candidate in accordance with Article 3.

4.2.2 Unity Compounds. Ascentage hereby covenants that it shall not research or develop, nor shall it authorize any Third Party (including its Affiliates) to research or develop, any Unity Compound for the diagnosis, prophylaxis, treatment or palliation of any indications that are not Oncology

Indications. The foregoing restriction will survive the termination or expiration of this Agreement for any reason.

4.2.3 Existing Compounds and Future Ascentage Compounds.

(a) Restrictions on Development for Indications Being Developed by Unity. Ascentage hereby covenants that it shall not develop or commercialize, nor shall it authorize any Third Party (including its Affiliates) to develop or commercialize, any Existing Compound or Future Ascentage Compound for the diagnosis, prophylaxis, treatment or palliation of any indication which:

(i) [***]: (A) [***], or (B) [***] with respect to an [***] in compliance with [***]. The foregoing restriction will survive on an indication-by-indication basis for so long as [***] or [***]. [***] agrees to [***] all indications which [***]. Additionally, [***] agrees to [***].

(ii) is one of up to [***] ([***]) indications [***] as being an indication with respect to which [***] within [***] ([***]) [***] of [***] (each, an "[***]"). Upon [***], [***] will [***]. The exclusivity granted to Unity with respect to such [***] will [***], such that (A) following the [***], if an [***] with respect to [***], then [***], (B) following the [***], if an [***] with respect to [***], then [***], and [***] until the [***], at which point this Section 4.2.3(a)(ii) shall be of no further force and effect.

(iii) As used herein, an "[***]" with respect to a given indication, means that either: (A) [***], or (B) either [***] or [***].

(iv) For clarity, it is understood that (A) Unity's rights to develop Compounds are limited to the development of Compounds for indications other than Oncology Indications, and (B) this Section 4.2.3(a) shall in no way restrict Ascentage's right to develop and commercialize Existing Compounds or Future Ascentage Compounds for Oncology Indications.

(b) General Restrictions on Development outside of Oncology Indications. Within the Grace Period, Ascentage hereby covenants that it shall not research or develop any Existing Compounds or Future Ascentage Compounds for the diagnosis, prophylaxis, treatment or palliation of any indication that is not an Oncology Indication unless such Existing Compound or Future Ascentage Compound [***].

(c) Restrictions on Development of Carved Out Indications. Without limiting Section 4.2.3(a) and (b) above, Ascentage further covenants that it will not develop nor shall it authorize any Third Party (including its Affiliates) to develop, any Compound for a Carved Out Indication except as permitted under this Section 4.2.3(c).

(i) No more than [***] in any rolling [***] ([***]) [***] period, Ascentage may request permission to develop [***] ("Subject Compound") for prophylaxis or treatment of one or more Carved Out Indications ("Subject Indications"). Such request shall be submitted in writing and shall include a description of the Compound (including its structure), a [***] below, and a description of the Carved Out Indication(s) proposes to pursue.

(ii) Unity shall not withhold its consent with respect to such validly submitted request, so long as:

(A) [***];

(B) [***];

(C) [***].

(iii) Upon approval by Unity of such request (which approval shall be provided in writing), Ascentage shall be free to pursue the development of the Subject Compound for the Subject Indication(s) provided that:

(A) The [***] may be developed shall be limited to [***];

(B) Unity shall have a right of first refusal with respect to development and commercialization of such Subject Compound as further described in Article 8 below.

(iv) The Parties will negotiate and agree upon [***] for use under Section 4.2.3(c)(ii)(B) within [***] immediately after the Effective Date of this Agreement ("[***]"). Ascentage will appoint [***] and Unity will appoint [***] to negotiate such agreements on their respective behalf. Once agreed upon, the [***] shall be appended hereto as [***].

ARTICLE 5
MANAGEMENT

5.1 Joint Research Committee. Ascentage and Unity will establish a committee (the "Joint Research Committee" or "JRC") to coordinate the parties activities under this Agreement. The responsibilities of the Joint Research Committee shall consist of:

5.1.1 Facilitating the exchange of materials and information between the parties;

5.1.2 Monitoring and reporting of the discovery of Ascentage Future Compounds and Unity Compounds;

5.1.3 Reviewing and discussing issues that may arise involving the designation or release of Active Compounds;

5.1.4 Initial, informal mediation of any other dispute that arises under this Agreement; and

5.1.5 Such other responsibilities as both parties may mutually agree to delegate to the JRC.

5.2 Membership. The JRC shall include two (2) representatives of each of Ascentage and Unity, with each party's members selected by that party. Ascentage and Unity may each replace its JRC representatives at any time, upon written notice to the other party.

5.3 Meetings. The JRC shall meet at least [***], or more frequently as agreed by the parties, at such locations as the parties agree, and will otherwise communicate regularly. With the consent of the parties, other representatives of Ascentage or Unity may attend JRC meetings as nonvoting observers. Each party shall be responsible for all of its own expenses associated with attendance of such meetings.

5.4 Decision Making. With respect to decisions taken on matters placed by either party before the JRC, each party shall have one vote. Decisions of the JRC shall be made by unanimous approval of the parties. If the members of the JRC cannot reach an agreement after commercially reasonable efforts to do so, then either party's representative to the JRC may refer such dispute to the [***] of each party, who shall meet in person or by telephone within [***] ([***]) days after such referral to attempt in good faith to resolve such dispute.

ARTICLE 6
PAYMENTS

6.1 Upfront Fee. As partial consideration for the rights and licenses granted to Unity under this Agreement, Unity shall issue to Ascentage, subject to Ascentage's execution and delivery to Unity of a Stock Issuance Agreement in substantially the form attached hereto as Exhibit 6.1 – part A (such form of agreement, the "Stock Agreement"), Three Hundred Ninety Three Thousand Three Hundred Thirty Five (393,335) shares of Unity common stock; such shares to be issued to Ascentage within [***] ([***]) days of the Effective Date. A capitalization table for Unity true and complete as of the Effective Date, is attached hereto as Exhibit 6.1 – part B.

6.2 First Locally-Dosed Licensed Compounds. Upon Unity's designation of each of the first two (2) locally-dosed Development Candidates, Unity shall issue to Ascentage Three Hundred Ninety Three Thousand Three Hundred Thirty Five (393,335) shares of Unity common stock, for each locally dosed Development Candidate; such shares to be issued to Ascentage pursuant to the Stock Agreement within [***] ([***]) days of date a Compound License Agreement is executed with respect to such Development Candidate.

6.3 Equity Cap. Notwithstanding anything in the contrary in this Agreement, any Compound License Agreement or the APG-1252 License Agreement, the maximum cumulative aggregate number of shares of Unity common stock that Ascentage is eligible to receive under Sections 6.1 and 6.2 of this Agreement, Section 5.1 of all Compound License Agreements and Section 5.1 of the APG-1252 License Agreement is:

(a) [***] ([***]) shares of Unity common stock if only one Licensed Product is developed; and

(b) Three Million Nine Hundred Thirty Three Thousand Three Hundred and Fifty (3,933,350) shares of Unity common stock if two or more Licensed Products is developed.

6.4 Purchase of Ascentage Shares.

6.4.1 Disclosure of Series B Documentation. Promptly following the Effective Date, Ascentage shall provide to Unity true and correct copies of all of the relevant documents related to Jiangsu Ascentage's most recent financing, including without limitation, the investment agreement, any stockholders agreement, and the charter documents (collectively the "Series B Documentation")

6.4.2 First Tranche of Preferred Stock. Within [***] ([***]) days of the later of the Effective Date and Unity's receipt of the Series B Documentation, Unity shall purchase $[***] of Jiangsu Ascentage's equity, at the same price and on the same terms as those applicable to the investors that participated in Jiangsu Ascentage's most recent financing.

6.4.3 Second Tranche of Preferred Stock. Within [***] ([***]) days of the later of the Effective Date and Unity's receipt of the Series B Documentation, Unity shall purchase an additional $[***] of Ascentage's preferred stock at a valuation equal to the greater of (a) $[***] on terms that are otherwise *pari passu* to the terms of the most recent financing, and (b) the most recent preferred stock valuation if Jiangsu Ascentage consummates a stock financing after the Effective Date, in which case Unity shall purchase such shares at the same price and on the same terms as those applicable to the investors that participated in such financing.

6.5 Board Observer. After the purchase $[***] of Jiangsu Ascentage's equity by Unity, Ascentage shall invite a representative of [***], initially [***], to attend in all meetings of its board of directors (including committees thereof) in a non-voting 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; *provided*, *however*, that Ascentage reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if (a) access to such information or attendance at such meeting could adversely affect the attorney-client privilege between Ascentage and its counsel; or (b) access to such information or attendance at such meeting could result in disclosure of trade secrets to Unity.

6.6 Unity's Covenants. Unity hereby agrees that any shares of common stock issued to Ascentage will not be diluted unless diluted in good faith by Unity on a proportionate basis to other shares of common stock of Unity outstanding at the time of any such dilution, and subject to the anti-dilution protections as set forth in Unity's certificate of incorporation, as may be amended from time to time in good faith; provided further, that Unity shall not take actions that specifically

treat Ascentage differently from other holders of common stock, or issue any capital stock in a manner which is intended to circumvent this covenant. The shares of common stock issued to Ascentage shall be duly adjusted for any bonus issue, share split, consolidation, subdivision, reclassification, recapitalization or similar arrangement of Unity, in each case in accordance with, and as expressly contemplated by, Unity's certificate of incorporation, as may be amended from time to time in good faith.

ARTICLE 7
INTELLECTUAL PROPERTY

7.1 License Grants to Unity.

7.1.1 License to Conduct Compound Screening. Subject to the terms and conditions of this Agreement, Ascentage hereby grants to Unity an non-exclusive license under the Ascentage Intellectual Property solely to carry out Compound Screening of the Compounds in the Library;

7.1.2 License to Develop Unity Active Compounds. Subject to the terms and conditions of this Agreement, Ascentage hereby grants to Unity a license co-exclusive with Ascentage under the Ascentage Intellectual Property to develop Active Compounds for the prophylaxis and treatment of, and palliation of symptoms associated with, indications that are not Oncology Indications..

7.1.3 License to Manufacture Compounds. Subject to the terms and conditions of this Agreement, Ascentage hereby grants to Unity an non-exclusive license under the Ascentage Intellectual Property to manufacture or have manufactured additional quantities of Compounds previously delivered pursuant to Section 2.2, 2.3.2, or 2.3.3(a)(ii) solely for use in accordance with Sections 7.1.1 and 7.1.2. above.

7.2 Prosecution of Compound-Related Patents. Subject to Unity's rights under any Compound License Agreements then in effect, Ascentage shall have the first right, but shall not be obligated under this Agreement, to prosecute and maintain Compound-Related Patents as it deems commercially reasonable and necessary. Ascentage shall bear all patent costs that it incurs in relation to the filing, prosecution and maintenance of the Compound-Related Patents under this Agreement. Unity shall have the right, at its own cost and expense, to reasonably assist Ascentage in connection with the filing, prosecution and maintenance of any Compound-Related Patent covering any Compound [***]. If Ascentage, prior or subsequent to filing any Compound-Related Patent anywhere in the world, elects not to file, prosecute or maintain such Patent or claims encompassed by such Patent in any country of the world, as the case may be, Ascentage shall give Unity notice thereof within [***] prior to allowing such Patent or such claims encompassed by such Patent to lapse or become abandoned or unenforceable, and Unity shall thereafter have the right, at its sole expense and [***], to prepare, file, prosecute and maintain such Patent or claims encompassed by such Patent in such country.

7.3 Interferences, Oppositions, Enforcement. As between the parties and subject to Unity's rights under any Compound License Agreements then in effect, Ascentage shall have the sole right (but not the obligation), at its expense, to conduct any interferences, oppositions, or reexaminations with respect to any Patents within the Ascentage Intellectual Property (including without limitation, the Compound-Related Patents), to request any reissues or patent term extensions thereof, and to initiate and prosecute enforcement actions against Third Parties infringing such Patents.

7.4 No Other Rights. No rights other than those expressly set forth in this Agreement are granted to either party hereunder, and no additional rights shall be deemed granted to either party by implication, estoppel or otherwise.

ARTICLE 8
RIGHT OF NOTICE AND OFFER FOR ASCENTAGE PRODUCTS FOR CARVED OUT INDICATIONS

8.1 Ascentage Notice. In the event that Ascentage wishes to pursue development and commercialization of Subject Compound for use in treating one or more Subject Indications, Ascentage shall deliver written notice to Unity of Ascentage's interest in pursuing the development of such Subject Compound together with a description of the Subject Indications it is proposing to pursue in reasonable detail to permit Unity to evaluate its interest in such opportunity.

8.2 Unity Notice. Within [***] ([***]) calendar days of Unity's receipt of such notice and description of the Subject Compound and Subject Indication(s), Unity will provide Ascentage with written notice either that (i) Unity is not interested in developing such Subject Compound for one or more of the Subject Indications, or (ii) Unity is interested in developing such Subject Compound for one or more of the Subject Indications. If Unity fails to deliver any notice within such [***] ([***])-day period, Unity will be deemed to have provided notice that it is not interested in developing such Subject Compound for one or more of the Subject Indications, in which case Ascentage will be free to develop and commercialize such Subject Compound for such Subject Indication(s) provided that such Subject Compound and Subject Indications are otherwise compliant with the requirements of Section 4.2.3.

8.3 Entry into New Compound License Agreement. If Unity provides Ascentage with timely notice under Section 8.2 above that it is interested in developing such Subject Compound for one or more of the Subject Indications, Unity and Ascentage shall promptly complete and execute the form of Compound License Agreement set forth in Exhibit 3.3.2(a). It is understood that Unity's continuing rights to such Subject Compound shall be dependent upon Unity achieving the applicable diligence milestones set forth therein, all as further specified in such Compound License Agreement.

8.4 Negotiation of Form JV Agreement. The Parties agree that they will negotiate and agree to form agreements relating to joint venture to be established for the purpose of commercializing the Licensed Products in the Greater China within [***] immediately after the Effective Date of this Agreement. Ascentage will appoint [***] and Unity will appoint [***] to negotiate such agreements on their respective behalf. Neither Party may develop, manufacture, distribute, sell or otherwise commercialize the Licensed Products in the Greater China other than

through the joint venture formed pursuant to this Agreement and the Compound License Agreement.

ARTICLE 9
CONFIDENTIALITY

9.1 Confidential Information. Except as otherwise expressly provided herein, the parties agree that the receiving party shall not, except as expressly provided in this Article 9, disclose to any Third Party or use for any purpose any proprietary information which is disclosed to it (whether orally or in writing) and identified as confidential ("Confidential Information"), except to the extent that it can be established by the receiving party by competent proof that such information:

(a) Was already known to the receiving party, other than under an obligation of confidentiality, at the time of disclosure;

(b) Was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving party;

(c) Became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this Agreement;

(d) Was independently developed by the receiving party without reference to information provided by the disclosing party as demonstrated by documented evidence prepared contemporaneously with such independent development; or

(e) Was disclosed to the receiving party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the disclosing party not to disclose such information to others.

9.2 Permitted Use and Disclosures. Each party hereto may use or disclose Confidential Information disclosed to it by the other party to the extent such use or disclosure (a) is reasonably necessary in the exercise of the rights granted to it hereunder or in carrying out its obligations hereunder, or (b) in prosecuting or defending litigation and complying with applicable governmental laws, regulations or court order, provided that if a party is required by law to make any such disclosure, other than pursuant to a confidentiality agreement, it will give reasonable advance notice to the other party of such disclosure and, save to the extent inappropriate in the case of patent applications or the like, will use its reasonable efforts to secure confidential treatment of such information in consultation with the other party prior to its disclosure (whether through protective orders or otherwise) and disclose only the minimum necessary to comply with such requirements.

9.3 Nondisclosure of Terms. Each of the parties hereto agrees not to disclose the terms of this Agreement to any Third Party without the prior written consent of the other party hereto, which consent shall not be unreasonably withheld, except to such party's attorneys, advisors,

investors and others on a need to know basis under circumstances that reasonably ensure the confidentiality thereof, or to the extent required by law.

9.4 Public Announcement. Unity may, in its discretion, issue a press release announcing the formation of this Agreement, which shall be substantially in a form approved by Ascentage prior to execution of the Agreement. Except with respect to such initial release, neither party shall issue an additional press release or public announcement relating to this Agreement without the prior written approval of the other party, which shall not be withheld unreasonably. Either party may refer to the research collaboration under this Agreement in promotional and other communications with prospective customers and investors, provided that such disclosure shall not include any technical details or any financial terms of the collaboration.

ARTICLE 10
REPRESENTATIONS AND WARRANTIES

10.1 Warranty. Each party represents and warrants on its own behalf and on behalf of its Affiliates that: (a) it has the legal power and authority to enter into this Agreement and to perform all of its obligations hereunder; (b) this Agreement is a legal and valid obligation binding upon it and enforceable in accordance with its terms; and (c) it has not previously granted, and during the term of this Agreement will not make any commitment or grant, any rights which are in conflict in any material way with the rights and licenses granted herein.

10.2 Additional Ascentage Warranties. Ascentage represents and warrants on its own behalf and on behalf of its Affiliates that as of the Effective Date:

10.2.1 there are no actual or pending actions, suits or claims, by any third party (a) challenging the ownership of the Existing Compounds; (b) challenging the validity, effectiveness, enforceability, or ownership of Ascentage Intellectual Property.

10.2.2 The Patents within the Ascentage Intellectual Property are subsisting, in force or pending, as the case may be, and are not the subject of any interference, reissue, reexamination, opposition, cancellation or similar administrative proceedings.

10.2.3 Ascentage has not brought a claim alleging an infringement by a Third Party of any of the Patents within the Ascentage Intellectual Property and to Ascentage's actual knowledge, there is no actual or alleged infringement by a Third Party of any of the Patents within the Ascentage Intellectual Property.

10.2.4 there are no Patents: (a) filed by Ascentage and subsequently assigned to Third Party, or (b) with respect to which Ascentage or its Affiliates have acquired rights from a Third Party (i.e., through in-licenses, cross-licenses or otherwise), in each case that (i) would be required for Unity to research, develop, manufacture, use or commercialize the Existing Compounds and (ii) are not included within the Ascentage Intellectual Property.

10.2.5 there are no actual or pending actions, suits or claims, by any Third Party asserting that the manufacture, use, sale, offer for sale or importing of a Compound infringes the intellectual property of a Third Party and to Ascentage's knowledge, the development and commercialization of the Compounds would not infringe (a) any issued Patents of any Third Party (other than Patents in-licensed from UM), or (b) any published Patent claim of any Third Party (other than claims of Patents in-licensed from UM) if such claim were to issue as published.

10.2.6 Ascentage has disclosed to Unity all material agreements with Third Parties in effect as of the Effective Date pursuant to which Ascentage Intellectual Property relating to BCL-2/BCL-xL inhibitors was licensed, acquired or sold.

10.2.7 The copy of UM License Agreement (including the first amendment to such license agreement) disclosed to Unity by Ascentage is a true, accurate, and complete copy of the UM License Agreement.

10.3 Certain Rights and Obligations under the UM License Agreement.

10.3.1 Ascentage shall not modify, amend or otherwise alter the UM License Agreement to the extent the same would materially and adversely affect Unity's rights under this Agreement.

10.3.2 Ascentage shall not (a) exercise or fail to exercise any right under the UM License Agreement or (b) provide or fail to provide any consent or approval with respect to any right or obligation under the UM License Agreement, in each case to the extent the same would materially and adversely affect Unity's rights under this Agreement.

10.3.3 Ascentage shall not unilaterally terminate the UM License Agreement.

10.4 Disclaimer. ASCENTAGE AND UNITY SPECIFICALLY DISCLAIM ANY GUARANTEE THAT THE RESEARCH UNDERTAKEN HEREUNDER WILL BE SUCCESSFUL, IN WHOLE OR IN PART. THE FAILURE OF THE PARTIES TO SUCCESSFULLY DEVELOP ACTIVE COMPOUNDS OR PRODUCTS WILL NOT CONSTITUTE A BREACH OF ANY REPRESENTATION OR WARRANTY OR OTHER OBLIGATION UNDER THIS AGREEMENT. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, UNITY AND ASCENTAGE MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE ASCENTAGE INTELLECTUAL PROPERTY, COMPOUNDS, OR INFORMATION DISCLOSED HEREUNDER, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF ANY TECHNOLOGY, PATENTED OR UNPATENTED, OR NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

ARTICLE 11
INDEMNIFICATION

11.1 Ascentage. Ascentage agrees to indemnify and defend Unity and their respective directors, officers, employees, agents and their respective successors, heirs and assigns (the "Unity Indemnitees") against any losses, costs, claims, damages, liabilities or expense (including reasonable attorneys' and professional fees and other expenses of litigation) (collectively, "Liabilities") arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, to the extent (i) relating to any products based on the Compounds developed, manufactured, used, sold or otherwise distributed by or on behalf of Ascentage, its Affiliates, licensees or other designees including, without limitation, product liability and patent infringement claims, or (ii) resulting from a breach by Ascentage of its representations and warranties under this Agreement, except, in each case, to the extent such Liabilities result from the gross negligence or intentional misconduct of Unity.

11.2 Unity. Unity agrees to indemnify and defend Ascentage and their respective directors, officers, employees, agents and their respective heirs and assigns (the "Ascentage Indemnitees") against any Liabilities arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, to the extent resulting from a breach by Unity of its representations and warranties under this Agreement, except, in each case, to the extent such Liabilities result from the gross negligence or intentional misconduct of Ascentage.

11.3 Procedure. In the event that any Indemnitee intends to claim indemnification under this Article 11 it shall promptly notify the other party in writing of such alleged Liability. The indemnifying party shall have the right to control the defense thereof with counsel of its choice as long as such counsel is reasonably acceptable to Indemnitee; provided, however, that any Indemnitee shall have the right to retain its own counsel at its own expense, for any reason, including if representation of any Indemnitee by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party reasonably represented by such counsel in such proceeding. The affected Indemnitee shall cooperate with the indemnifying party and its legal representatives in the investigation of any action, claim or liability covered by this Article 11. The Indemnitee shall not compromise or settle any claim or suit, or voluntarily incur any expense with respect to any such claim or suit, in each case, without the prior written consent of the indemnifying party, which such party shall not be required to give.

ARTICLE 12
TERM AND TERMINATION

12.1 Term. This Agreement shall commence on the Effective Date and shall continue in full force and effect until the expiration of the applicable Grace Period ("Term"), unless terminated earlier as provided in this ARTICLE 12.

12.2 Termination for Breach. In the event of a material breach of this Agreement, the nonbreaching party shall be entitled to terminate this Agreement by written notice to the breaching party, if such breach is not cured within sixty (60) days after written notice is given by the nonbreaching party to the breaching party specifying the breach.

12.3 Effects of Termination.

12.3.1 Accrued Rights and Obligations. Termination of this Agreement for any reason shall not release either party hereto from any liability which, at the time of such termination, has already accrued to the other party or which is attributable to a period prior to such termination nor preclude either party from pursuing any rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement.

12.3.2 Return of Compound. Upon expiration or termination of this Agreement for any reason, Unity shall return to Ascentage all unused quantities of the Compounds, or destroy such quantities at the written request of Ascentage.

12.3.3 Survival. Articles 1 (Definitions), 8 (Right of Notice and Offer for Ascentage Products for Carved-Out Indications), 9 (Confidentiality), 10 (Representations and Warranties), 11 (Indemnification) 13 (Dispute Resolution) and 14 (Miscellaneous) and Sections 3.5, 4.2.3(a)(i) and (ii) (but only for the durations specified therein), 4.2.3(c), 6.4 and 12.3 shall survive the expiration or termination of this Agreement for any reason, provided that in the case of Sections 3.5, 4.2.3(a)(i), 4.2.3(a)(ii) and 4.2.3(c), survival of these sections shall be contingent upon Unity having fulfilled its obligations under Section 6.1. Except as otherwise provided in this Article 12, all rights and obligations of the parties under this Agreement shall terminate upon the expiration or termination of this Agreement.

12.4 Condition Precedent.

12.4.1 This Agreement is entered into subject to the condition precedent that Ascentage and UM agree upon and execute an amendment to the UM License Agreement ("Second Amendment") adjusting the royalties owing to UM in connection with the activities contemplated by this Agreement (including the attached Exhibits). All rights and obligations set forth in the Agreement shall only become effective upon the Effective Date.

12.4.2 Ascentage hereby agrees to use its commercially best efforts to complete and execute the Second Amendment as soon as reasonably practicable.

DISPUTE RESOLUTION

13.1 Dispute Resolution.

13.1.1 Consultation. If an unresolved dispute (other than a dispute among members of the JRC regarding a decision of the JRC) arises out of or relates to this Agreement, or the breach thereof, either party may refer such dispute to the [***] of each party, who shall meet in person or by telephone within

[***] ([***]) days after such referral to attempt in good faith to resolve such dispute. If such matter cannot be resolved by discussion of the respective [***]s within such [***] ([***]) days period (as may be extended by mutual agreement), either party shall be entitled to seek resolution of such dispute pursuant to Section 13.1.2 below.

13.1.2 Arbitration. If the parties are unable to resolve a dispute on an issue of interpretation, breach or enforcement of this Agreement, the parties shall refer such dispute to be finally resolved by binding arbitration under the terms of this Section 13.1.2, except that all disputes with respect to the validity or infringement of Patents shall be subject to applicable federal court jurisdiction and not subject to the terms of this Section 13.1.2. Whenever a party shall decide to institute arbitration proceedings, it shall give written notice to that effect to the other party. Any such arbitration shall be conducted under the commercial arbitration rules of the [***] in effect, which are deemed to be incorporated by reference into this paragraph by a panel of three (3) arbitrators in [***]. Each party shall select one (1) arbitrator who is not employed by, or otherwise affiliated with, such party within [***] ([***]) days after the institution of arbitration proceedings, and the two (2) arbitrators so selected shall designate the third arbitrator. The parties shall use their commercially reasonable efforts to conclude the arbitration hearings within [***] ([***]) [***] following the confirmation of the third and presiding arbitrator.

13.2 Injunctive Relief. This Article 13 shall not be construed to prohibit either party from seeking preliminary or permanent injunctive relief, restraining order or degree of specific performance in any court of competent jurisdiction to the extent not prohibited by this Agreement. For avoidance of doubt, any such equitable remedies provided under this Article 13 shall be cumulative and not exclusive and are in addition to any other remedies, which either party may have under this Agreement or applicable law.

ARTICLE 14
MISCELLANEOUS

14.1 Governing Laws. This Agreement and any dispute arising from the construction, performance or breach hereof shall be governed by and construed, and enforced in accordance with, the laws of the state of New York, USA, without reference to conflicts of laws principles.

14.2 Waiver. It is agreed that no waiver by either party hereto of any breach or default of any of the covenants or agreements herein set forth shall be deemed a waiver as to any subsequent and/or similar breach or default.

14.3 Assignment. This Agreement shall not be assignable by either party without the written consent of the other party hereto, except that either party may assign this Agreement, without such consent, to an entity that acquires all or substantially all of the business or assets of such party whether by merger, reorganization, acquisition, sale, or otherwise; provided, however, that within [***] ([***]) days of such an assignment, the assignee shall agree in writing to be bound by the terms and conditions of this Agreement. Any assignment in contravention of the

foregoing shall be null and void. Subject to the foregoing, this Agreement shall bind and inure to the benefit of each party's successors and permitted assigns.

14.4 Independent Contractors. The relationship of the parties hereto is that of independent contractors. The parties hereto are not deemed to be agents, partners or joint venturers of the others for any purpose as a result of this Agreement or the transactions contemplated thereby.

14.5 Compliance with Laws. In exercising their rights under this Agreement, the parties shall fully comply in all material respects with the requirements of any and all applicable laws, regulations, rules and orders of any governmental body having jurisdiction over the exercise of rights under this license including, without limitation, those applicable to the discovery, development, manufacture, distribution, import and export and sale of Ascentage Products pursuant to this Agreement.

14.6 Notices. All notices, requests and other communications hereunder shall be in writing and shall be personally delivered or by registered or certified mail, return receipt requested, postage prepaid, in each case to the respective address specified below, or such other address as may be specified in writing to the other parties hereto and shall be deemed to have been given upon receipt:

If to Unity: Unity Biotechnology, Inc.
1700 Owens Street, Suite 535
San Francisco, CA 94158, USA
Attention: [***]
Email: [***]

If to Ascentage: Ascentage Pharma Group Corp. Ltd.
Room 201, QB3 Building, Medical City Avenue
Hi-Tech BioMed District, Taizhou City, Jiangsu Province
P.R. China, 225300
Attention: [***]
Email: [***]

14.7 Severability. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect to the fullest extent permitted by law without said provision, and the parties shall amend the Agreement to the extent feasible to lawfully include the substance of the excluded term to as fully as possible realize the intent of the parties and their commercial bargain.

14.8 Advice of Counsel. Unity and Ascentage have each consulted counsel of their choice regarding this Agreement, and each acknowledges and agrees that this Agreement shall not be deemed to have been drafted by one party or another and will be construed accordingly.

14.9 Performance Warranty. Each party hereby warrants and guarantees the performance of any and all rights and obligations of this Agreement by its Affiliates and licensees.

14.10 Force Majeure. Neither party shall lose any rights hereunder or be liable to the other party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, governmental acts or orders or restrictions, failure of suppliers, or any other reason where failure to perform is beyond the reasonable control and not caused by the negligence, intentional conduct or misconduct of the non-performing party and such party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a party be required to settle any labor dispute or disturbance.

14.11 Complete Agreement. This Agreement with its schedules and exhibits, constitutes the entire agreement, both written and oral, between the parties with respect to the subject matter hereof, and all prior agreements respecting the subject matter hereof, either written or oral, express or implied, shall be abrogated, canceled, and are null and void and of no effect. No amendment or change hereof or addition hereto shall be effective or binding on either of the parties hereto unless reduced to writing and executed by the respective duly authorized representatives of Unity and Ascentage.

14.12 Headings. The captions to the several Sections and Articles hereof are not a part of this Agreement, but are included merely for convenience of reference and shall not affect its meaning or interpretation.

14.13 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same agreement.

14.14 Bankruptcy. All rights and licenses granted under or pursuant to this Agreement by each party as a licensor are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title ll, U.S. Code (the "Bankruptcy Code"), licenses of rights to "intellectual property" as defined under section 101(35A) of the Bankruptcy Code. The parties agree that each licensee of such rights under this Agreement, shall retain and may fully exercise all rights and elections it would have in the case of a licensor bankruptcy under the Bankruptcy Code. Each party agrees during the term of this Agreement to create or maintain current copies, or if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such intellectual property licensed to the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their authorized representatives and delivered in duplicate originals as of the Signing Date.

ASCENTAGE PHARMA GROUP CORP. LTD.	UNITY BIOTECHNOLOGY, INC.
By:/s/ Dajun Yang	By: /s/ Nathaniel David
Name: Dajun Yang, MD, PhD	Name: Nathaniel David, PhD
Title: Chief Executive Officer	Title: Chief Executive Officer

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT 1.25

RESEARCH AGREEMENT

This Research Services Agreement (the "Agreement") is made this 2nd day of February, 2016 (the "Signing Date") by and between **Ascentage Pharma Group Corp. Ltd.**, a [Hong Kong corporation] ("Ascentage"), with a business address at 11/F, AXA CENTRE, Gloucester Road, Wanchai, Hong Kong, and **Unity Biotechnology, Inc.**, a Delaware corporation ("Unity"), with a business address at 1700 Owens Street, Suite 535, San Francisco, California 95158.

WHEREAS, Unity and Ascentage entered into that certain license agreement (the "APG-1252 License Agreement") of even date herewith, pursuant to which Unity obtained a license to commercialize that certain BCL-2/BCL-xL inhibitor known as "APG-1252" for indications other than Oncology Indications (as defined in the Library Agreement).

WHEREAS, Unity and Ascentage have entered into that certain compound library and option agreement (the "Library Agreement") of even date herewith pursuant to which Ascentage has granted to Unity the right to screen Ascentage's existing collection of BCL-2/BCL-xL inhibitor compounds as well as any additional BCL-2/BCL-xL inhibitor compounds discovered by Ascentage during the term of the Library Agreement, in each case to identify compounds with potential utility in the treatment of age-related conditions other than cancer;

WHEREAS, Unity wishes to fund certain research services by Ascentage in furtherance of its screening and analysis with respect to Ascentage's BCL-2/BCL-xL inhibitor compounds, including without limitation the synthesis and derivatization of BCL-2/BCL-xL inhibitor compounds discovered through such screening and analysis; and

WHEREAS, Ascentage wishes to provide such research services in accordance with the terms and conditions of this Agreement and attached Project Addenda (as defined below).

WHEREAS, the parties intend for this Agreement to become effective as of the date on which the Second Amendment (as defined in Section 5.8(a) below) takes effect (the "Effective Date").

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:

1.0 Projects and Project Addenda.

1.1 From time-to-time during the term of this Agreement Unity may request Ascentage to provide Unity with certain services, including without limitation services relating to the discovery, synthesis, characterization and derivatization of novel BCL-2/BCL-xL inhibitor compounds. Upon reaching agreement with respect to the requested services (including the consideration to be paid to Ascentage in connection with such services), a project addendum

describing in detail the activities to be conducted (such activities, collectively a "Project") and consideration to be paid to Ascentage shall be attached to this Agreement (each a "Project Addendum"), and such Project Addendum, together with this Agreement (but separate and apart from any other Project Addendum), shall collectively constitute the entire agreement for such Project. No Project Addendum, or any modification thereto, shall be attached to or made a part of this Agreement without first being executed by the parties hereto in a writing which specifically references this Agreement. To the extent any terms set forth in a Project Addendum conflict with the terms set forth in this Agreement, the terms of this Agreement shall control unless otherwise expressly agreed by the parties in such Project Addendum.

1.2 Within sixty (60) days of the Effective Date, the Unity and Ascentage shall agree upon the initial research services to be provided by Ascentage, which agreement shall be documented in a project addendum to be attached hereto as Appendix A ("Project Addendum No. 1").

2.0 Services.

2.1 General.

a) Diligence. Ascentage hereby agrees to (i) complete the services for Projects described in each Project Addendum (the "Services"), (ii) comply with the terms of the applicable Project Addendum, and (iii) provide its Services under each Project in the timeframe specified in the Project Addendum unless Ascentage later decides such Services cannot be completed within such timeframe within commercially reasonable efforts by providing notice to Unity to request extended timeframe. If an extended timeframe is needed, both parties shall discuss in good faith about the new timeframe and the additional costs needed. Ascentage is not obligated to continue Services if such agreement is not achieved.

b) Subcontractors. Ascentage shall not assign, delegate, or subcontract any of the Services without the prior written approval of Unity, which approval shall not be unreasonably withheld. Notwithstanding the foregoing, it is agreed that prior written approval of Unity shall not be required in the event that Ascentage wishes to delegate specific portions of the Services to one or more of the following Affiliates and third party vendors listed on Appendix B, provided that Ascentage shall remain responsible for directly performing of the majority of the Services. Ascentage shall remain liable under this Agreement for the performance of all its obligations under this Agreement and shall be responsible for and liable for compliance by all permitted subcontractors with the applicable provisions of this Agreement.

2.2 Project Management.

a) The "Project Coordinator" for Unity and the "Project Manager" for Ascentage will be specified in the Project Addendum for each Project. The Project Coordinator and the Project Manager will be responsible for day-to-day communications between the parties regarding the subject matter of this Agreement, including without limitation all Project Addenda and any Services and other activities conducted under any Project.

b) The Project Coordinator and the Project Manager will be responsible for (i) monitoring the schedules and progress of work pursuant to this Agreement;

(ii) receiving and submitting requests for information and/or assistance; (iii) determining whether a request he or she receives for information and/or assistance from the other is necessary for the other party to complete a specific "Deliverable" (as defined in its respective Project Addendum); (iv) receiving and submitting Deliverables; (v) cooperating to implement acceptance testing; and (vi) supervising and recording the exchange of confidential information pursuant to this Agreement.

c) The Project Coordinator and the Project Manager will meet regularly to discuss the progress of the development effort and, if applicable, to exchange information and Deliverables.

d) Except in the case of an emergency, in the event the Project Manager will be unavailable to perform Services as set forth in the Project Addenda at any time during the Term for a period longer than [***] days (as defined below), Ascentage shall inform Unity and appoint a new Project Manager.

2.3 Exclusive Services. During the Term, Ascentage shall not, and shall ensure that the Project Manager and Ascentage Personnel shall not, conduct the Services in conjunction with any other projects being conducted at Ascentage that would (a) conflict with any of the provisions of this Agreement, or (b) preclude Ascentage from complying with the provisions hereof.

2.4 Records; Reports; Further Assurances.

a) Records. In connection with the Services performed hereunder, for each Project, Ascentage shall ensure that the Project Manager and Ascentage Personnel who perform such Services shall maintain laboratory notebooks, records and data ("Records") in accordance with good laboratory and research practices and will make such records available to Unity or Unity's authorized representative throughout the term of this Agreement during normal business hours upon reasonable notice at Unity's expense. Upon request by Unity and at Unity's expense, Ascentage agrees to provide copies of all such materials to Unity within a reasonable timeframe, in whatever condition maintained by Project Manager and Ascentage Personnel working on the Project.

b) Reports. Ascentage shall ensure that the Project Manager, and Ascentage Personnel working on a Project, submit to Unity [***] within [***] ([***]) days after the end of each [***] a written technical report summarizing the research, data, methods, results, conclusions and other information that the Project Manager considers material and relevant ("Results") obtained therefrom during the prior [***] ([***]) [***] period relating to such Project. Within [***] ([***]) days after the completion or termination of a Project, the Project Manager shall submit to Unity a final written technical report of major activities undertaken and major accomplishments achieved in connection with such Project (the "Final Report").

3.0 Deliverables; Acceptance/Rejection/Correction.

3.1 Deliverables. When Ascentage believes that a Deliverable has been appropriately completed under a Project, Ascentage will deliver it to Unity. Unity will accept or reject each Deliverable within [***] ([***]) days after delivery; failure to give notice of

acceptance or rejection within that period will constitute acceptance. Unity may reject a Deliverable only if such Deliverable fails to meet the Specifications in material respect therefor stated in the applicable Project Addendum or as otherwise agreed to by the parties in writing.

3.2 Acceptance/Rejection/Correction. If Unity rejects a Deliverable because such Deliverable fails to meet the Specifications in material respect, Ascentage will [***] to promptly correct the failures within a timeframe that such failures can be corrected with Ascentage's [***]. When Ascentage believes that it has made the necessary corrections, Ascentage shall again deliver such Deliverable to Unity and the acceptance/rejection/correction provisions above shall be reapplied until such Deliverable is accepted. If Unity again rejects the deliverable, the parties shall discuss the reasons for such failures and if such failures can be corrected with [***].

4.0 Compensation and Payment.

4.1 To fund the Services to be provided hereunder, for so long as this Agreement remains in effect Unity shall pay to Ascentage Five Hundred Thousand U.S. Dollars ($500,000) per year, such amount to be paid in advance in [***] increments of [***] U.S. Dollars ($[***]) (such funds, the "Advanced Funds"). In consideration for Services rendered in connection with the performance of the Projects, Ascentage shall be entitled to deduct from the Advanced Funds the amounts due to Ascentage in accordance with the payment schedule (the "Payment Schedule") included in the respective Project Addendum attached to this Agreement. Unless otherwise agreed, compensation for Services will be on a time and materials basis, with time spent being accounted for based on the number of FTEs dedicated to performing the applicable Services and the costs of materials and third party services being passed through without mark-up as further described below. Each Project Addendum shall set forth (a) the number of FTEs agreed upon by the parties, (b) the FTE Rate, and (c) the agreed upon Out-of-Pocket Costs. For purposes of this Agreement, "FTE" shall mean a full time dedicated scientific employee of Ascentage, or if less than a full time dedicated scientific employee, a full time, equivalent scientific employee year based upon a total of [***] ([***]) working hours per year of scientific work, on or directly related to the Services carried out by an employee dedicated to work on a Project, in each case, having necessary qualifications to perform the Services. "FTE Rate" means, unless otherwise agreed between the Parties, a rate per FTE equal to [***], which rate may be prorated on a daily or hourly basis as necessary and as may be adjusted from time to time by mutual agreement of the Parties. The FTE Rate is [***] and will cover [***]. Out-of-Pocket Costs" means travel (airfare, mobile allowance, meal expenses, hotel expenses etc.) and other incidental expenses incurred by such personnel in the performance of the Services, and amounts paid to third party vendors or contractors for services or materials provided by them directly in the performance of Services under the applicable Project. For clarity, Out-of-Pocket Costs do not include [***] all of which shall be included in the FTE Rate. Any Advanced Funds not utilized in any contract year may be carried forward to future contract years until expended. To the extent that the value of the Services requested by Unity in any contract year exceeds the amount of the Advanced Funds available in such contract year (i.e., Five Hundred Thousand U.S. Dollars ($500,000) plus any unexpended Advanced Funds from prior years), the total payment for such contract year shall be increased by an amount equal to the difference between the cost of the requested Services and the amount of the available Advanced Funds (such amount, the "Additional Research Payment"). At Unity's election, any Additional Research Payments from previous contract years may be credited against the Five Hundred Thousand U.S.

Dollars ($500,000) funding obligation in subsequent years (e.g., in the event that Unity funds $750,000 of Services in contract year 1, Unity would only be obligated to fund $250,000 in Services in contract year 2).

4.2 In the event this Agreement or any Project Addendum is terminated pursuant to Article 5 of this Agreement, Ascentage shall be compensated for accrued fees and expenses as set forth in Section 5.5 below. Any funds held by Ascentage which are unearned at the date of termination shall be returned to Unity within [***] ([***]) days of termination of a Project, Project Addendum or this Agreement.

4.3 Payments to Ascentage shall be made to:

Ascentage Pharma Group Corp. Ltd.
[***]

4.4 Income taxes and withholding taxes (and any penalties and interest thereon) imposed on any payment made by Unity to Ascentage, as well as any sales tax. value-added or similar taxes for which a seller of goods and services is generally responsible, shall be the responsibility of Ascentage.

4.5 Ascentage shall ensure that its Project Manager and Ascentage Personnel maintain complete and accurate accounting records related to their participation in the Project(s) in accordance with applicable generally accepted accounting principles.

5.0 Term and Termination.

5.1 The term of this Agreement shall be four (4) years commencing upon the Effective Date (the "Term").

5.2 Commencing on the first anniversary of the Effective Date, this Agreement or any Project or Project Addendum may be terminated by Unity, without cause, upon ninety (90) days' notice to Ascentage.

5.3 This Agreement may be terminated by either party for material breach by the other party, provided that the terminating party has given the breaching party written notice of the breach and at least sixty (60) days to cure the breach prior to the effective date of termination.

5.4 Ascentage shall have the right to terminate this Agreement upon sixty (60) days' written notice to Unity if in any contract year Unity fails to pay Ascentage at least Five Hundred Thousand U.S. Dollars ($500,000) for Services contracted hereunder (taking into account any permitted credits for previous Additional Research Funding as described in Section 4.1 above).

5.5 Upon the effective date of termination, there shall be an accounting of costs and expenses related to the Agreement, Project, or Project Addendum, as appropriate, conducted by Ascentage and subject to verification by Unity. Within [***] ([***]) days after receipt of the results of such accounting and an invoice from Ascentage, Unity shall make a payment to

Ascentage (and/or Ascentage may retain from Advanced Funds previously paid by Unity) for Services performed, including:

a) actual reasonable, documented costs, to the extent approved by Unity in a Project Addendum or in a prior written authorization, incurred by Ascentage in performing Services until the effective date of termination and for which Ascentage has not yet been paid by Unity; and

b) reasonable non-cancelable obligations incurred for the Project, to the extent approved by Unity in a Project Addendum or in a prior written authorization, by Ascentage prior to the effective date of termination to extent such obligations cannot reasonably be mitigated.

c) accrued fees for FTEs, to the extent devoted to performance of Project(s) prior to termination and pursuant to the applicable Project Addendum(a).

d) Except as provided in this Section 5.5, Unity shall have no obligation of payment to Ascentage for Services performed after the date of termination. In no event shall Unity have any obligation with respect to fees or expenses otherwise not approved by Unity in a Project Addendum or in a prior written authorization.

5.6 Upon request, expiration, or termination of this Agreement, Ascentage will deliver and/or return to Unity all materials containing Information of Unity, as well as data, records, information, reports and other property, furnished by Unity to Ascentage, together with all copies of any of the foregoing at Unity's expense.

5.7 The obligations of the parties contained in Sections 2.4(b), 4.2-4.4 and 5.4 through 5.7 and Articles 6.0, 7.0, 9.0, 10.0 and 14.0 through 25.0 hereof shall survive expiration or termination of any Project and/or this Agreement.

5.8 Condition Precedent.

a) This Agreement is entered into subject to the condition precedent that Ascentage and the Regents of the University of Michigan ("UM") agree upon and execute an amendment to that certain license agreement, entered into by Ascentage and the Regents of the University of Michigan ("UM") effective as of December 1, 2010, adjusting the royalties owing to UM in connection with the activities contemplated by the APG-1252 License Agreement and the Library Agreement (including the Compound License Agreements contemplated by the Library Agreement) (such amendment, the "Second Amendment"). All rights and obligations set forth in the Agreement shall only become effective upon the Effective Date.

b) Ascentage hereby agrees to use its commercially best efforts to complete and execute the Second Amendment as soon as reasonably practicable.

6.0 Confidentiality.

6.1 Unity holds a proprietary interest in the written and oral information which Unity discloses to Ascentage and identifies as confidential (hereinafter "Information"). As used herein, the "Information" of Unity shall also include the Deliverables. Ascentage agrees to protect the confidentiality of any and all Information disclosed to Ascentage by Unity and to use such Information solely for the performance of the Services described herein with the exception of the following which Ascentage can demonstrate by competent written proof:

a) Information which is or (through no improper action or inaction by Ascentage or its employees) becomes generally known to the public; or

b) Information which was rightfully disclosed to Ascentage by a third party without restriction and with the legal right to disclose such information (including, without limitation, without any breach of the third party's obligations to the disclosing party); or

c) Information which was in Ascentage' possession or was known to Ascentage prior to receipt from Unity, as evidenced by its contemporaneous written records; or

d) Information which was independently developed by employees of Ascentage without access to such Information, as evidenced by its contemporaneous written records.

6.2 Except as expressly allowed herein, Ascentage agrees (i) to hold the Information in strict confidence and to take all reasonable precautions to protect such Information, (ii) not to disclose, directly or indirectly, any Information or any information derived therefrom to any third person (except employees of Ascentage, subject to the conditions stated below), and (iii) not to use such Information, except as expressly permitted under this Agreement.

6.3 Ascentage may disclose any Information that is required to be disclosed by law, government regulation or court order. If disclosure is required, Ascentage will give Unity at least [***] ([***]) business days advance notice (unless prohibited by law or court order) so that Unity may seek a protective order or take other action reasonable in light of the circumstances.

7.0 Intellectual Property.

7.1 Ownership. Subject to the rights and licenses granted to Unity under the Library Agreement and any Compound License Agreement(s) (as defined in the Library Agreement) that the parties may subsequently enter into, as between the parties, Ascentage shall own all right, title and interest (including patent rights, copyrights, trade secret rights, mask work rights, database rights and all other intellectual property rights worldwide) in any inventions, works of authorship, mask works, ideas or information made or invented by employees and any permitted subcontractors of Ascentage (collectively, "Ascentage Technology"). Right, title and interest to any inventions, works of authorship, mask works, ideas or information that are made jointly by employees and/or permitted subcontractors of Ascentage and Unity (collectively, "Joint Technology") shall be owned jointly. For purposes of this Section 7.1 whether any inventions, works of authorship, mask works, ideas or information that are made "jointly" shall be determined under the applicable laws of the United States of America, including in the case of patentable inventions, the principles of inventorship established in Title 35 of the United States

Code (“US Patent Law”), and "joint ownership" means that Unity and Ascentage (subject to the rights granted by Ascentage to Unity under the APG-1252 License Agreement and the Library Agreement (including any future license agreement(s) contemplated in the Library Agreement), shall each be free to exploit such patent rights and authorize others to do so, with no obligation to obtain consent of the other or to account to the other party for profits or otherwise.

7.2 Inclusion of Program Technology in Ascentage Intellectual Property. All Ascentage Technology arising under the Subcontracted Project Plan(s), together with Ascentage’s interest in all Joint Technology arising under the Subcontracted Project Plan(s), shall be automatically included within the Ascentage Intellectual Property for purposes of the Library Agreement and any future Compound License Agreement(s).

8.0 Representations, Warranties and Covenants.

8.1 Representations and Warranties. Each party represents and warrants to the other party that as of the Effective Date:

a) it has full power and authority to enter into and perform this Agreement;

b) neither its entering nor performing this Agreement will violate any right of or breach any obligation to any third party under any agreement or arrangement between such party and such third party;

8.2 Certain Covenants.

a) the work under this Agreement will be performed in a professional and workman-like manner;

b) Ascentage has and will obtain agreements with its employees requiring them to assign to Ascentage all right, title and interest in any intellectual property they develop in the course of their employment by Ascentage.

9.0 Indemnification. Ascentage agrees to indemnify and defend Unity and its directors, officers, employees, agents and their respective successors, heirs and assigns (the “Unity Indemnitees”) against any losses, costs, claims, damages, liabilities or expense (including reasonable attorneys’ and professional fees and other expenses of litigation) (collectively, “Liabilities”) arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, to the extent resulting from (a) injuries to persons or damages which occur on Ascentage’s premises or premises under the exclusive control of Ascentage, or (b) breach by Ascentage of its representations, warranties and covenants under Article 8 above, or (c) the negligence or intentional misconduct of Ascentage or any of its directors, officers, employees, agents or representatives, except in each case, to the extent such Liabilities result from the gross negligence or intentional misconduct of Unity.

10.0 Dispute Resolution.

10.1 Consultation. If an unresolved dispute arises out of or relates to this Agreement, or the breach thereof, either party may refer such dispute to the [***] of each party, who shall meet in person or by telephone within [***] ([***]) days after such referral to attempt in good faith to resolve such dispute. If such matter cannot be resolved by discussion of the respective [***] within such [***] ([***]) days period (as may be extended by mutual agreement), either party shall be entitled to seek resolution of such dispute pursuant to Section 10.2 below.

10.2 Arbitration. If the parties are unable to resolve a dispute on an issue of interpretation, breach or enforcement of this Agreement, the parties shall refer such dispute to be finally resolved by binding arbitration under the terms of this Section 10.2, except that all disputes with respect to the validity or infringement of Patents shall be subject to applicable federal court jurisdiction and not subject to the terms of this Section 10.2. Whenever a party shall decide to institute arbitration proceedings, it shall give written notice to that effect to the other party. Any such arbitration shall be conducted under the commercial arbitration rules of the [***], which are deemed to be incorporated by reference into this paragraph by a panel of three (3) arbitrators in [***]. Each party shall select one (1) arbitrator who is not employed by, or otherwise affiliated with, such party within [***] ([***]) days after the institution of arbitration proceedings, and the two (2) arbitrators so selected shall designate the third arbitrator. The parties shall use their commercially reasonable efforts to conclude the arbitration hearings within [***] ([***]) [***] following the confirmation of the third and presiding arbitrator.

10.3 Injunctive Relief. This Article 10 shall not be construed to prohibit either party from seeking preliminary or permanent injunctive relief, restraining order or degree of specific performance in any court of competent jurisdiction to the extent not prohibited by this Agreement. For avoidance of doubt, any such equitable remedies provided under this Article 10 shall be cumulative and not exclusive and are in addition to any other remedies, which either party may have under this Agreement or applicable law.

11.0 Independent Contractor Relationship. The parties hereto are independent contractors and nothing contained in this Agreement shall be construed to place them in the relationship of partners, principal and agent, employer/employee or joint venturer. Both parties agree that neither shall have power or right to bind or obligate the other, nor shall either hold itself out as having such authority.

12.0 Publicity. Except as required by law, neither party shall use the name of the other party nor of any employee of the other party in connection with any publicity or media purposes without the prior written approval of the other party. It is understood and agreed that Unity may disclose Ascentage's performance of the Services hereunder with Ascentage's prior written approval, including, without limitation, by naming Ascentage, in government filings, regulatory disclosures and scientific publications.

13.0 Force Majeure. Neither party shall lose any rights hereunder or be liable to the other party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, governmental acts or orders or restrictions, failure of suppliers, or any other reason where failure to perform is beyond the reasonable control and not

caused by the negligence, intentional conduct or misconduct of the non-performing party and such party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a party be required to settle any labor dispute or disturbance.

14.0 Notices. Any notice required or permitted to be given hereunder by either party hereunder shall be in writing and shall be deemed given on the date received if delivered personally or by fax or [***] ([***]) days after the date postmarked if sent by registered or certified U.S. mail, return receipt requested, postage prepaid to the following address:

If to Unity: Unity Biotechnology, Inc.
1700 Owens Street, Suite 535
San Francisco, CA 94158, USA
Attention: [***]
Email: [***]

If to Ascentage: Ascentage Pharma Group Corp. Ltd.
Room 201, QB3 Building, Medical City Avenue
Hi-Tech BioMed District, Taizhou City, Jiangsu Province
P.R. China, 225300
Attention: [***]
Email: [***]

15.0 Governing Law. This Agreement and any dispute arising from the construction, performance or breach hereof shall be governed by and construed, and enforced in accordance with, the laws of the state of New York, USA, without reference to conflicts of laws principles.

16.0 Severability. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect to the fullest extent permitted by law without said provision, and the parties shall amend the Agreement to the extent feasible to lawfully include the substance of the excluded term to as fully as possible realize the intent of the parties and their commercial bargain.

17.0 Waiver. Waiver or forbearance by either party or the failure by either party to claim a breach of any provision of this Agreement or exercise any right or remedy provided by this Agreement or applicable law, shall not be deemed to constitute a waiver with respect to any subsequent breach of any provision hereof.

18.0 Changes and Modification. No changes or modifications of this Agreement or any Project Addendum shall be deemed effective unless in writing and executed by the parties hereto.

19.0 Assignment. Unity may assign this Agreement to an Affiliate (as defined in the Library Agreement). Otherwise, this Agreement may not be assigned by Ascentage or Unity without the prior written consent of the other, such consent not to be unreasonably withheld, except that either party may assign this Agreement, without such consent, to an entity that acquires all or substantially all of the business or assets of such party whether by merger,

reorganization, acquisition, sale, or otherwise; provided, however, that within [***] ([***]) days of such an assignment, the assignee shall agree in writing to be bound by the terms and conditions of this Agreement. Any assignment in contravention of the foregoing shall be null and void. Subject to the foregoing, this Agreement shall bind and inure to the benefit of each party's successors and permitted assigns.

20.0 Advice of Counsel. Unity and Ascentage have each consulted counsel of their choice regarding this Agreement, and each acknowledges and agrees that this Agreement shall not be deemed to have been drafted by one party or another and will be construed accordingly.

21.0 Complete Agreement. This Agreement with its schedules and appendices, constitutes the entire agreement, both written and oral, between the parties with respect to the subject matter hereof, and all prior agreements respecting the subject matter hereof, either written or oral, express or implied, shall be abrogated, canceled, and are null and void and of no effect. No amendment or change hereof or addition hereto shall be effective or binding on either of the parties hereto unless reduced to writing and executed by the respective duly authorized representatives of Unity and Ascentage.

22.0 Compliance with Laws. In exercising their rights under this Agreement, the parties shall comply in all material respects with the requirements of any and all applicable laws, regulations, rules and orders of any governmental body of applicable jurisdiction.

23.0 Headings. The captions to the several Sections and Articles hereof are not a part of this Agreement, but are included merely for convenience of reference and shall not affect its meaning or interpretation.

24.0 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same agreement.

25.0 Bankruptcy. All rights and licenses granted under or pursuant to this Agreement by each party as a licensor are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title ll, U.S. Code (the "Bankruptcy Code"), licenses of rights to "intellectual property" as defined under section 101(35A) of the Bankruptcy Code. The parties agree that each licensee of such rights under this Agreement, shall retain and may fully exercise all rights and elections it would have in the case of a licensor bankruptcy under the Bankruptcy Code. Each party agrees during the term of this Agreement to create or maintain current copies, or if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such intellectual property licensed to the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their authorized representatives and delivered in duplicate originals as of the Signing Date.

ASCENTAGE PHARMA GROUP CORP. LTD.	UNITY BIOTECHNOLOGY, INC.
By:/s/ Dajun Yang	By: /s/ Nathaniel David
Name: Dajun Yang, MD, PhD	Name: Nathaniel David, PhD
Title: Chief Executive Officer	Title: Chief Executive Officer

APPENDIX A

UNITY AND ASCENTAGE

MASTER SERVICES AGREEMENT

PROJECT ADDENDUM

DESCRIPTION OF SERVICES; PAYMENT SCHEDULE

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

APPENDIX B

PERMITTED AFFILIATES AND THIRD PARTY VENDORS

[***]

EXHIBIT 1.26

SENOLYTIC TEST

Part A: Protocol for Senolytic Test

- **[***]**

Part B: [***]

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT 2.2

COMPOUND FORMULATION

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT 2.5.1

ASCENTAGE ACTIVE COMPOUNDS AS OF THE EFFECTIVE DATE

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

EXHIBIT 2.6

BIOCHEMICAL ASSAY

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT 3.3.2(a)

FORM OF COMPOUND LICENSE AGREEMENT

This Compound License Agreement (the "Agreement") effective as of the day of , 20 , **[Insert date of designation of applicable Development Candidate under Section 3.3.2(a) of the Compound Library and Option Agreement]** (the "Effective Date") is made by and between **Ascentage Pharma Group Corp. Ltd.**, a Hong Kong corporation ("Ascentage"), with a business address at 11/F, AXA CENTRE, Gloucester Road, Wanchai, Hong Kong, and **Unity Biotechnology, Inc.**, a Delaware corporation ("Unity"), with a business address at 1700 Owens Street, Suite 535, San Francisco, California 95158. Each of Ascentage and Unity shall be a "Party," and both the "Parties."

BACKGROUND

A. Unity and Ascentage entered into (i) that certain Compound Library and Option Agreement dated February 2, 2016 (the "Library Agreement"), pursuant to which Unity has certain rights to acquire a license under the Licensed Intellectual Property to commercialize specified compounds, and (ii) that certain license agreement dated February 2, 2016 (the "APG-1252 License Agreement"), pursuant to which Unity obtained a license to commercialize that certain BCL-2/BCL-xL inhibitor known as "APG-1252" for treatment of age-related conditions; and

B. Unity has exercised its rights under the Library Agreement to acquire from Ascentage such a license under the Licensed Intellectual Property, all as set forth below on the terms and conditions herein.

NOW, THEREFORE, for and in consideration of the covenants, conditions, and undertakings hereinafter set forth, it is agreed by and between the Parties as follows:

ARTICLE 1
DEFINITIONS

1.1 The following terms have the meanings set forth in the Library Agreement:

Active Compound
Affiliate
Ascentage Intellectual Property
Back-up Compounds
Compounds
Development Candidates
Greater China
IND
Oncology Indications
Patents
Stock Agreement
Technology
Third Party

1.2 "Fair Market Value" means with respect to a share of Unity common stock, the average price that Unity common stock is publicly trading at for [***] ([***]) days prior to the date in question, or, if the security is not publicly traded, the value of such stock as determined in good faith by Unity's board of directors in reliance upon Unity's most recent IRC Section 409A independent valuation of Unity's common stock that it used for the purposes of granting stock options to its employees**.**

1.3 "Control" and its correlative terms, "Controlled" or "Controls" shall mean, with respect to any Patent or item of Technology, that a Party or one of its Affiliates owns or possesses rights to such Patent or item of Technology sufficient to grant the access, license or sublicense contemplated in this Agreement without violating the terms of any agreement or other arrangement with any Third Party.

1.4 "Cover" and its correlative terms, "Covers", "Covered" or "Covering" means (a) with respect to an issued patent, that, in the absence of a license, the use, offer for sale, sale, importation or manufacture of the product in question would infringe one or more claims of such patent or (b) with respect to a pending patent application, that, in the absence of a license, the use, offer for sale, sale, importation or manufacture of the product in question would infringe one or more claims of such patent application, should such claims issue as published.

1.5 "Enabling IP" means Patents and/or Technology of a Third Party that Covers or relates to a Licensed Product and is necessary or useful for the research, development, manufacture, use, sale or import of Licensed Products, including Patents directed to the composition and manufacture of Licensed Compounds, but excluding Patents related to formulation and therapeutic methods.

1.6 "EMA" means the European Medicines Agency and any successor agency.

1.7 "Existing Agreements" means (a) that certain Exclusive License Agreement between Unity and the Mayo Foundation for Medical Education and Research originally entered into by the parties effective June 28th, 2013; (b) that certain Exclusive License Agreement between Unity and the Buck Institute for Research on Aging originally entered into by the parties effective February 3rd, 2014; and (c) that certain Exclusive License Agreement between Unity and the Board of Trustees of the University of Arkansas originally entered into by the parties effective April 28th, 2015.

1.8 "FDA" means the United States Food and Drug Administration and any successor agency.

1.9 "Field" means the prophylaxis and treatment of, and palliation of symptoms associated with, indications other than Oncology Indications.

1.10 "Generic Product" means a product which (a) contains as its active pharmaceutical ingredient a compound that is (or is substantially the same as) the Licensed Compound, and (b) has been placed on the market pursuant to a validly granted marketing authorization.

1.11 "Licensed Compound" means the Development Candidate listed in Schedule 1.11 hereto.

1.12 "Licensed Product-Specific Patents" means those Licensed Patents that [***] the Licensed Compound and/or Licensed Product and [***].

1.13 "Licensed Intellectual Property" means the Licensed Patents and Licensed Technology.

1.14 "Licensed Patents" means Patents owned or Controlled by Ascentage or its Affiliates during the Term, in each case to the extent Covering the Licensed Compound or a Licensed Product.

1.15 "Licensed Product" means a pharmaceutical product containing the Licensed Compound (either alone or with other active pharmaceutical ingredients), in all forms, presentations, formulation and dosage forms.

1.16 "Licensed Technology" means Technology owned or Controlled by Ascentage or its Affiliates during the Term, in each case to the extent such Technology is necessary or reasonably useful for the development, manufacture or commercialization of the Licensed Compound or a Licensed Product.

1.17 "Marketing Approval Application" or "MAA" means a New Drug Application (or its equivalent), as defined in the U.S. Food, Drug and Cosmetic Act and the regulations promulgated thereunder, or any corresponding or similar application, registration or certification in any country.

(a) "Net Sales" means the gross amount invoiced to non-Affiliate Third Parties on sales of Licensed Products by Unity or its Affiliates or Third Party Sublicensees, less the actual amounts incurred, allowed, or paid for the following items (if not previously deducted from the amount invoiced and provided that such deductions are calculated in accordance with generally accepted accounting principles of the United States of America ("GAAP") on a consistent basis): (a) trade, cash, and quantity discounts; (b) amounts for claims, allowances or credits for returns, rejections or recalls; (c) freight, shipping and insurance charges allocable to such Licensed Products; (d) sales taxes, duties and other governmental charges (including value added tax) on particular sales, but excluding what is commonly known as income taxes; (e) government mandated rebates; (f) contracted rebates; and (g) a provision for uncollectible accounts; in each case as determined from books and records of the selling party maintained in accordance with GAAP, as consistently applied by such selling party. In the event that Unity grants a sublicense to a Third Party Sublicensee hereunder, and receives payments based upon such Third Party Sublicensee's sales of Licensed Product, Unity may, with Ascentage's consent, which consent shall not be unreasonably withheld or delayed, substitute the definition of "Net Sales," used by such Third Party Sublicensee to calculate its payments to Unity in place of the foregoing definition of "Net Sales" for purposes of calculating royalties payable to Ascentage on such Third Party Sublicensee's sales.

1.18 "Phase I Clinical Trial" means a human clinical trial, the principal purpose of which is preliminary determination of safety of a drug in healthy individuals or patients, that would satisfy the requirements of 21 C.F.R. §312.21(a).

1.19 "Phase II Clinical Trial" means a clinical trial of a drug conducted on a limited number of patients for the purpose of preliminary evaluation of clinical efficacy and safety of such drug, and/or to obtain an indication of the dosage regimen required, in each case that would satisfy the requirements of 21 C.F.R. 312.21(b).

1.20 "Phase III Clinical Trial" means a pivotal human clinical trial intended to gather additional information regarding the safety and efficacy of the drug in patients with the disease being studied, which clinical study is designed to be of a size and statistical power sufficient to support the filing of an MAA and that would satisfy the requirements of 21 C.F.R. 312.21(c).

1.21 "Territory" means the entire world excluding Greater China.

1.22 "Third Party Sublicensee" means any Third Party to which Unity licenses the right to commercialize any Licensed Product. For the avoidance of doubt, "Third Party Sublicensee" shall not include Third Party distributors, service providers, vendors and suppliers that do not have the right to market or promote Licensed Product.

1.23 "UM License Agreement" means that certain license agreement entered into by Ascentage and the Regents of the University of Michigan ("UM") effective as of December 1, 2010, as amended by all amendments to such license agreement existing as of the Effective Date.

1.24 "Valid Claim" means a claim contained in an issued Patent within the Licensed Patents in any country that (a) has not expired; (b) has not been disclaimed; (c) has not been cancelled or superseded, or if cancelled or superseded, has been reinstated; and (d) has not been revoked, held invalid, or otherwise declared unenforceable or not allowable by a tribunal or patent authority of competent jurisdiction over such claim in such country from which no further appeal has or may be taken.

ARTICLE 2
LICENSES

2.1 Licenses.

2.1.1 Development Licenses. Subject to the terms and conditions of this Agreement, Ascentage hereby grants to Unity:

(a) a royalty-free, exclusive license in the Field and the Territory, with the right to grant sublicenses as provided in Section 2.2, under the Licensed Intellectual Property to (i) research, develop and seek and obtain marketing approval for the Licensed Compound and Licensed Products and (ii) package the Clinical Materials (as defined in Schedule 4.1) supplied by or on behalf of Ascentage, in each case in the Field and Territory, and to have any of the foregoing performed on its behalf by a Third Party; and

(b) a royalty-free, non-exclusive license in the Field and the Territory, with the right to grant sublicenses as provided in Section 2.2, under the Ascentage Intellectual Property to manufacture or have manufactured Licensed Compound and Licensed Product for non-clinical research and development purposes.

2.1.2 Commercialization Licenses. Subject to the terms and conditions of this Agreement, Ascentage hereby grants to Unity a royalty-bearing, exclusive license in the Field and the Territory, with the right to grant sublicenses as provided in Section 2.2, under the Licensed Intellectual Property: (a) to use the Licensed Compound supplied by or on behalf of Ascentage to make or have made the Licensed Products; (b) to make or have made Licensed Products and all components thereof (including without limitation, Licensed Compound) and (c) to use, offer for sale, sell, import, export, market, promote and distribute Licensed Compounds and Licensed Products; in each case, solely for use in the Field and Territory, and to have any of the foregoing performed on its behalf by a Third Party. For clarity, it is understood and agreed that Unity's right under subsection (b) above to make or have made Licensed Products and all components thereof may only be exercised as permitted under Schedule 4.1.

2.2 Sublicenses. Unity may grant and authorize sublicenses within the scope of the license granted to Unity pursuant to this Agreement, provided that for clarity, Unity shall remain responsible for all milestone and other payments due to Ascentage under this Agreement based on the activities of Unity's sublicensees.

2.3 Third Party Intellectual Property. If after the Effective Date, Ascentage acquires or licenses from a Third Party subject matter that would fall within the Licensed Intellectual Property ("Third Party Intellectual Property") that is subject to any payment obligation to the Third Party, then Ascentage shall so notify Unity and Unity shall inform Ascentage if it wishes such subject matter to be included within the Licensed Intellectual Property. If Unity notifies Ascentage that it does wish such subject matter to be so included, the rights granted to Unity hereunder with respect to such Third Party Intellectual Property shall be subject to Unity promptly reimbursing Ascentage for [***] and Unity shall reimburse Ascentage for [***]. Upon request by Unity, Ascentage shall disclose to Unity a written description of such payment obligations. Notwithstanding the foregoing, Unity shall have the right to treat amounts paid to Ascentage as reimbursements for payments for Enabling IP for purposes of Section 5.5.

2.4 No Implied Licenses. Nothing herein shall be construed as granting Unity, by implication, estoppel or otherwise, any license or other right (a) to any intellectual property of Ascentage other than the Licensed Intellectual Property (b) to commercialize Licensed Products outside of the Field and Territory (c) not relating to the Licensed Compound and Licensed Products or (d) any right or license other than those expressly granted herein.

2.5 Exclusivity with Respect to Licensed Compounds. Ascentage hereby covenants that except as expressly permitted under any future agreement that the Parties may enter into pursuant to Article 8 below pertaining to the China JVCO, Ascentage shall not: (a) research, develop, use or commercialize, and shall not authorize any Affiliate or other Third Party to research, develop, use or commercialize, the Licensed Compound or any Licensed Product, and (b) manufacture, or authorize any Third Party to manufacture, the Licensed Compound or any Licensed Product, other than for supply to Unity in accordance with the terms of Schedule 4.1.

2.6 [***]. The Parties agree that within [***] of the Effective Date of this Agreement they will put in place a procedure pursuant to which [***] shall [***] that [***] to [***].

ARTICLE 3
DUE DILIGENCE

3.1 General. Unity shall use commercially reasonable efforts to develop and obtain marketing approval for at least one Licensed Product hereunder, and thereafter shall use commercially reasonable efforts to launch and commercialize each such Licensed Product and to fulfil the market demand therefor.

3.2 Diligence Milestones. Without limiting the it's general diligence obligations under Section 3.1 above, Unity agrees that it shall achieve the following diligence milestones with respect to the Licensed Compound by the deadlines specified below:

Milestone	Time Period
1. [***]	Within [***] ([***]) [***] of the Effective Date
2. [***]	Within [***] ([***]) [***] of the Effective Date
3. [***]	Within [***] ([***]) [***] of the Effective Date
4. [***]	Within [***] ([***]) [***] of the Effective Date

If Unity is unable to meet [***], as applicable, by the specified deadline, Unity shall none-the-less be deemed to be in compliance with its diligence obligations hereunder so long as it [***].

3.3 Substitution of Licensed Compound.

3.3.1 General. If Unity elects to discontinue development of a Licensed Compound for [***] reasons, then Unity shall have a right to replace such abandoned Licensed Compound with the Back-up Compound listed in Schedule 3.3. Following such replacement pursuant to this Section 3.3, the Back-up Compound shall be considered a "Substitute Licensed Compound".

3.3.2 Designation. In the event that Unity wishes to exercise its right under this Article 3 to select a Substitute Licensed Compound, Unity will provide Ascentage with written notice specifying the Licensed Compound for which development is being discontinued and the Back-up Compound that it wishes to replace it with ("Substitution Notice").

3.3.3 Following designation of a Substitute Licensed Compound, the Parties shall promptly update Schedule 1.11 to reflect the substitution of the Substitute Licensed Compound for the current Licensed Compound. Upon any such substitution, all references to the "Licensed Compound" in this Agreement shall thereafter be deemed to refer to such Substitute Licensed Compound, and the compound for which such Substitute Licensed Compound was substituted shall cease to be considered a Licensed Compound.

ARTICLE 4
MANUFACTURE AND SUPPLY

4.1 Subject to the terms and conditions of this Agreement, Ascentage (itself or through one or more Third Party contract manufacturers) shall manufacture and supply Unity, its Affiliates and their Third Party Sublicensees with (a) Clinical Materials, and (b) Licensed Compound, in each case in accordance with Schedule 4.1 ("Supply Terms"). Subject to the terms and conditions of this Agreement, Unity shall purchase Clinical Materials and Licensed Compound from Ascentage in accordance with Schedule 4.1. Upon Unity's request, Ascentage and Unity shall enter into a separate supply agreement substantially reflecting the Supply Terms set forth in Schedule 4.1 as well as other customary terms and conditions (the "Supply Agreement"). Unless and until such time as the Parties have executed the Supply Agreement, the terms of Schedule 4.1 shall govern any supply of Clinical Material and Licensed Compound requested by Unity.

ARTICLE 5
PAYMENTS

5.1 Equity Grants.

5.1.1 [***]. Upon the [***], Unity shall issue to Ascentage Three Hundred Ninety Three Thousand Three Hundred Thirty Five (393,335) shares of Unity common stock; such shares to be issued to Ascentage pursuant to the Stock Agreement within [***] ([***]) days of date that [***] occurs. For clarity, [***].

5.1.2 [***]. Upon the [***], Unity shall issue to Ascentage the following number of shares of Unity common stock based on how long after the Effective Date such [***]; such shares to be issued to Ascentage pursuant to the Stock Agreement within [***] ([***]) days of date that such [***] occurs:

(a) [***] ([***]) shares of Unity common stock if such [***] occurs within [***] ([***]) [***] of the Effective Date.

(b) [***] ([***]) shares of Unity common stock if such [***] occurs more than [***] ([***]) [***] after the Effective Date but less than [***] ([***]) [***] after the Effective Date.

(c) [***] ([***]) shares of Unity common stock if such [***] occurs more than [***] ([***]) [***] after the Effective Date.

5.1.3 Equity Cap. Notwithstanding anything in the contrary in this Agreement, the Library Agreement, the APG-1252 License Agreement or any other Compound License

Agreement, the maximum cumulative aggregate number of shares of Unity common stock that Ascentage is eligible to receive under Sections 6.1 and 6.2 of the Library Agreement, Section 5.1 of the APG-1252 License Agreement, this Section 5.1 or Section 5.1 of any other Compound License Agreement is:

(a) [***] ([***]) shares of Unity common stock if only one Licensed Product is developed; and

(b) Three Million Nine Hundred Thirty Three Thousand Three Hundred and Fifty (3,933,350) shares of Unity common stock if two or more Licensed Products is developed.

5.2 Development/Sales Milestones. In partial consideration of the rights and licenses granted herein to Unity, Unity shall pay Ascentage the following milestone payments.

[NTD: PRIOR TO EXECUTION PARTIES TO SELECT ONE OF THE THREE OPTIONS IN THIS SECTION 5.2 (DEVELOPMENT/SALES MILESTONES) AS WELL AS ONE OF THE THREE OPTIONS IN SECTION 5.3 (ROYALTIES) BASED ON WHETHER THE LICENSED COMPOUND IS (1) A [***], (2) A [***] OR (3) A [***]]

5.2.1 Option 1 [***]. Within [***] ([***]) days after the first achievement by Unity (or any of its Affiliates or Third Party Sublicensees) of each of the following milestones with respect to a Licensed Product containing a [***], Unity shall pay Ascentage the corresponding milestone payment set forth below, in accordance with the payment provisions of Article 6 below:

Milestone Event	***Milestone Payment***
1. [***]:	*$[***]*
2. [***]:	*$[***]*
3. [***]:	*$[***]*
4. [***]	*$[***]*
5. [***]	*$[***]*
Total per Licensed Product	*$[***]*

5.2.2 Option 2: [***]. Within [***] ([***]) days after the first achievement by Unity (or any of its Affiliates or Third Party Sublicensees) of each of the following milestones with respect to a [***], Unity shall pay Ascentage the corresponding milestone payment set forth below, in accordance with the payment provisions of Article 6 below:

Milestone Event	***Milestone Payment***
1. [***]:	*$[***]*
2. [***]:	*$[***]*
3. [***]:	*$[***]*
4. [***]	*$[***]*
5. [***]	*$[***]*
Total per Licensed Product	*$[***]*

5.2.3 *Option 3: [***].*

(a) *Within [***] ([***]) days after the first achievement by Unity (or any of its Affiliates or Third Party Sublicensees) of each of the following milestones with respect to the [***] to achieve such milestone, Unity shall pay Ascentage the corresponding milestone payment set forth below, in accordance with the payment provisions of Article 6 below:*

Milestone Event	***Milestone Payment***
1. [***]:	*$[***]*
2. [***]:	*$[***]*
3. [***]:	*$[***]*
4. [***]	*$[***]*
5. [***]	*$[***]*
Total per Licensed Product	*$[***]*

(b) *Within [***] ([***]) days after the first achievement by Unity (or any of its Affiliates or Third Party Sublicensees) of each of the following milestones with respect to the [***] to achieve such milestone, Unity shall pay Ascentage the corresponding milestone payment set forth below, in accordance with the payment provisions of Article 5 below:*

Milestone Event	***Milestone Payment***
1. [***]:	*$[***]*

Milestone Event	*Milestone Payment*
2. [***]:	*$[***]*
3. [***]:	*$[***]*
Total per Licensed Product	***$[***]***

5.2.4 Certain Additional Terms.

(a) For clarity, all forms, presentations, formulation and dosage forms of a Licensed Product shall be considered one and the same Licensed Product for purposes of this Section 5.2.

(b) If Unity begins development of one Licensed Product and a milestone payment is made under this Section 5.2, and then Unity terminates development of such Licensed Product and begins development of a second Licensed Product, the milestone which was already paid under this Section 5.2 for the abandoned Licensed Product will not be repeated, but the remaining milestone payments hereunder will be due as the second Licensed Product advances; *[NTD: IN THE EVENT OPTION 3 IS SELECTED, THE FOLLOWING ADDITIONAL SENTENCE SHALL BE ADDED TO SECTION 5.2.2(b): For clarity, it is acknowledged and agreed that should the first Licensed Product be abandoned prior to achieving all of the milestones set forth Section 5.2.1(a), such remaining unpaid milestones shall become due and payable when first achieved by the next Licensed Product.]*

(c) In its sole discretion, Unity may elect in lieu of the payment of the milestone payments owing to Ascentage under this Section 5.2, to grant to Ascentage that number of shares of Unity common stock of equivalent value (based on the Fair Market Value of such Unity common stock at the time of such grant).

5.3 Royalties. In partial consideration of the licenses granted herein to Unity, Unity shall pay to Ascentage a running royalty equal to the percentage set forth below on the Net Sales of Licensed Product based on the type of Compound contained in such Licensed Product, subject to any adjustments set forth in Sections 5.5 and 5.6, and in accordance with the payment provisions of Article 6 below.

5.3.1 Option 1: [***].

Annual Net Sales of Licensed Product	*Applicable Royalty Rate*
Portion of worldwide annual Net Sales of the Licensed Product less than or equal to [***] Dollars (US$[***])	*[***]%*

Portion of worldwide annual Net Sales of the Licensed Product over [***] Dollars (US$[***])	*[***]%*

5.3.2 Option 2: [***].

Annual Net Sales of Licensed Product	***Applicable Royalty Rate***
Portion of worldwide annual Net Sales of the Licensed Product less than or equal to [***] Dollars (US$[***])	*[***]%*
Portion of worldwide annual Net Sales of the Licensed Product over [***] Dollars (US$[***])	*[***]%*

5.3.3 Option 3: [***].

(a) With respect to Net Sales of the [***] to receive marketing approval, Unity shall pay to Ascentage the royalties set forth below:

Annual Net Sales of Licensed Product	***Applicable Royalty Rate***
Portion of worldwide annual Net Sales of the Licensed Product less than or equal to [***] Dollars (US$[***])	*[***]%*
Portion of worldwide annual Net Sales of the Licensed Product over [***] Dollars (US$[***])	*[***]%*

(b) With respect to Net Sales of the [***] to receive marketing approval, Unity shall pay to Ascentage the royalties set forth below:

Annual Net Sales of Licensed Product	***Applicable Royalty Rate***
Portion of worldwide annual Net Sales of the Licensed Product less than or equal to [***] Dollars (US$[***])	*[***]%*
Portion of worldwide annual Net Sales of the Licensed Product over [***] Dollars (US$[***])	*[***]%*

5.4 Royalty Term. Unity's obligation to pay royalties on Net Sales of Licensed Product under this Agreement shall continue on a country-by-country and Licensed Product-by-Licensed Product basis until the later of (a) abandonment or expiration of the last Valid Claim that claims the [***] contained in such Licensed Product in such country, (b) the date of expiry of any

applicable regulatory, pediatric, orphan drug or data exclusivity obtained for such Licensed Product in such country, or (c) ten (10) years after the first commercial sale of the Licensed Product by or under the authority of Unity in any country in the Territory.

5.5 Royalty Stacking. Unity shall be entitled to deduct from the amounts owing to Ascentage under Sections 5.2 and 5.3 above [***] percent ([***]%) of any royalties or other payments made to Third Parties for Enabling IP, provided that (a) the total aggregate amount payable to Ascentage under Sections 5.2 and 5.3 in any [***] may not be reduced to less than [***] percent ([***]%) of the amounts that would otherwise be due Ascentage in such [***], and

(a) Unity shall not be entitled to deduct any royalties or other payments made under the Existing Agreements. If, in any [***], Unity is not able to fully recover its [***] percent ([***]%) portion of the payments due to a Third Party, it shall be entitled to carry forward such right of off-set to future [***] with respect to the excess amount

5.6 Generic Products. If at any time during the term of this Agreement a Generic Product enters the market in any country and has for a period of at least [***] ([***]) consecutive [***] a market share in such country of at least [***] percent ([***]%) of the then combined unit volume of the corresponding Licensed Product (i.e., the Licensed Product containing the same active pharmaceutical ingredient(s) as are present in the Generic Product) and such Generic Product, then Unity's obligation to pay royalties to Ascentage on Net Sales of such Licensed Product in such country shall be to reduced to [***] percent ([***]%) of the amounts that would otherwise be due Ascentage under Section 5.3 in such calendar quarter.

5.7 Maximum Reduction to Royalties. Notwithstanding anything to the contrary in this Article 5, in no event shall the royalties owing to Ascentage with respect to Net Sales of a Licensed Product in any country be reduced by cumulative operation of Sections 5.5 and 5.6 to less than [***] percent ([***]%) of the amounts that would otherwise be due Ascentage under Section 5.3 in such calendar quarter.

5.8 Combination Products. In the event that a Licensed Product is sold for a single price in combination with another therapeutically active pharmaceutical ingredient, or other product or service, for which no royalty would be due hereunder if sold separately, Net Sales from such combination sales, for purposes of calculating the applicable royalty rate and the applicable royalty due under Section 5.3 shall be calculated by multiplying the Net Sales of the combination product by the fraction A/(A + B), where A is the average gross selling price during the previous [***] of the Licensed Product sold separately and B is the gross selling price during the previous [***] of the therapeutically active ingredient, product or service. In the event that separate sales of the Licensed Product or the additional therapeutically active ingredient, product or service were not made during the previous [***], then the Net Sales shall be reasonably allocated between such Licensed Product and such other active ingredient, product or service as agreed upon by the Parties, or failing agreement, determined in accordance with Section 13.1 (Dispute Resolution) below.

5.9 Unity's Covenant. Unity hereby agrees that any shares of common stock issued to Ascentage will not be diluted unless diluted in good faith by Unity on a proportionate basis to the other shares of common stock of Unity outstanding at the time of any such dilution, and subject to the anti-dilution protections as set forth in Unity's certificate of incorporation, as may be amended

from time to time in good faith; provided further, that Unity shall not take actions that specifically treat Ascentage differently from other holders of common stock, or issue any capital stock in a manner which is intended to circumvent this covenant. The shares of common stock issued to Ascentage shall be duly adjusted for any bonus issue, share split, consolidation, subdivision, reclassification, recapitalization or similar arrangement of Unity, in each case in accordance with, and as expressly contemplated by, Unity's certificate of incorporation, as may be amended from time to time in good faith.

ARTICLE 6
ACCOUNTING; RECORDS; METHOD OF PAYMENT

6.1 Royalty Reports; Payments, Invoices. After the first sale of a Licensed Product on which royalties are payable by Unity hereunder, Unity shall make quarterly written reports to Ascentage within [***] ([***]) days after the end of each calendar quarter, stating in each such report the number, description, and aggregate Net Sales of Licensed Product sold during the calendar quarter upon which a royalty is payable under Article 5 above. Concurrently with the making of such reports, Unity shall pay to Ascentage all amounts payable pursuant to Article 5 above, in accordance with the payment provisions of Section 6.3.

6.2 Records; Inspection. During the term of this Agreement and for a period of [***] ([***]) years thereafter, Unity and its Affiliates shall keep complete, true and accurate books of account and records for the purpose of determining the amounts payable to Ascentage under this Agreement. Ascentage shall have the right to cause an independent, certified public accountant reasonably acceptable to Unity to audit such records to confirm gross sales, Net Sales and royalty payments for a period covering not more than the preceding [***] ([***]) years. Unity agrees to either: (a) require each of its Third Party Sublicensees to maintain similar books and records and to open such records for inspection by an independent, certified public accountant reasonably satisfactory to such Third Party Sublicensee, on behalf of, and as required by, Ascentage for the purpose of verifying payments hereunder, or (b) obtain such audits rights from the Third Party Sublicensee for itself and exercise such audit rights on behalf of Ascentage upon Ascentage's request and disclose the results thereof to Ascentage. All such inspections may be made no more than [***] each calendar year at reasonable times and on reasonable notice. No accounting period of Unity or its Affiliate or Third Party Sublicensee shall be subject to audit more than one time hereunder. Such independent, certified public accountant will be obliged to execute a reasonable confidentiality agreement prior to commencing any such inspection. The results of any inspection hereunder shall be provided to both Parties, and Unity shall pay any underpayment to Ascentage within [***] ([***]) days. Inspections conducted under this Section 6.2 shall be at the expense of Ascentage (and Ascentage will reimburse Unity's reasonable out-of-pocket costs of those inspections conducted by Unity at Ascentage's request under (b) above), unless a variation or error producing an increase exceeding [***] percent ([***]%) of the amount stated for any period is established in the course of any such inspection, whereupon all costs of such audit of such period will be paid by Unity.

6.3 Payment Method. All payments due hereunder shall be made in U.S. dollars, and shall be made by bank wire transfer in immediately available funds to an account designated by Ascentage in a written notice to Unity. If any currency conversion shall be required in connection

with the payment of royalties hereunder, such conversion shall be made by using the exchange rates used by Unity in calculating Unity's own revenues for financial reporting purposes.

6.4 Late Payments. Any payments due from Unity that are not paid on the date such payments are due under this Agreement shall bear interest at [***] ([***]%) above the then prevailing US Federal Funds Target Rate (Bloomberg page: FDTR <Index>) per annum calculated on a daily basis and payable for the period from the date payment is due until the date payment is actually made. This Section 6.4 shall in no way limit any other remedies available to any Party.

ARTICLE 7
PATENT PROSECUTION AND ENFORCEMENT

7.1 Prosecution of Patents within the Licensed Intellectual Property.

7.1.1 General.

(a) Except as set forth in Section 7.1.1(b) or Section 7.1.1(c) hereof, Ascentage shall have the sole right to control the preparation, filing, prosecution and maintenance of all Licensed Patents using patent counsel of its choice.

(b) Unity shall have the first right, but not the obligation, to prepare, file, prosecute and maintain Licensed Product-Specific Patents. Unity shall (i) keep Ascentage reasonably informed as to its filing and prosecution strategy for Licensed Product-Specific Patents and the filing, prosecution and maintenance of Licensed Product-Specific Patents, (ii) provide Ascentage with a reasonable opportunity to review drafts of proposed patent office submissions with respect to Licensed Product-Specific Patents; and (iii) consider in good faith the requests and suggestions of Ascentage with respect to strategies for filing and prosecuting such Licensed Product-Specific Patents. In the event that Unity desires to abandon or decline further responsibility for any such Licensed Product-Specific Patent, Unity shall provide reasonable prior written notice to Ascentage of such intention to abandon or decline responsibility, but in no case later than [***] ([***]) days prior to any required action relating to the filing, prosecution or maintenance of such Licensed Product-Specific Patent, and Ascentage shall have the right, at its discretion, to assume such responsibility.

(c) With respect to any Licensed Patent (other than a Licensed Product-Specific Patent) that claims the Licensed Compound and/or Licensed Product, Ascentage shall have the first right, but not the obligation, to prepare, file, prosecute and maintain such Licensed Patent and shall (i) keep Unity reasonably informed as to its filing and prosecution strategy for such Licensed Patent and the filing, prosecution and maintenance of such Licensed Patent, (ii) provide Unity with a reasonable opportunity to review drafts of proposed patent office submissions with respect to such Licensed Patent; and (iii) follow the directions given by Unity with respect to filing and prosecuting such Licensed Patents, unless [***], in which case [***] and [***]. In the event that Ascentage desires to abandon or decline further responsibility for any Licensed Patent, Ascentage shall provide Unity [***] notice and the opportunity to assume responsibility for such Licensed Patent.

7.1.2 For purposes of this Article 7, "prosecution and maintenance" of patents and patent applications shall be deemed to include, without limitation, the conduct of interferences or oppositions, and/or requests for re-examinations, reissues or extensions of patent terms.

7.2 Enforcement of Licensed Patents. If either Party determines that a Third Party is making, using or selling a product that may infringe any Licensed Patent, that Party shall notify the other Party in writing.

7.2.1 Infringement by a Competitive Product.

(a) With respect to any such infringing activity that involves the manufacture, use or sale by a Third Party of any product that [***] ("Competitive Product"), Unity shall have the first right, at its sole option, to bring suit to enforce any Licensed Patent, and/or to defend any declaratory judgment action with respect thereto ("Enforcement Action"); provided, however, that Unity shall keep Ascentage reasonably informed as to the defense and/or settlement of any such Enforcement Action. Ascentage shall have the right to participate in any such Enforcement Action with counsel of its own choice at its own expense. All recoveries received by Unity from an Enforcement Action shall be first applied to reimburse Unity's and then Ascentage's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringing activity that involves the manufacture, use or sale by a Third Party of any Competitive Product, be treated as Net Sales.

7.2.2 In the event Unity elects not to initiate an Enforcement Action with respect to any commercially significant infringing activity that involves the manufacture, use or sale by a Third Party of any Competitive Product within [***] ([***]) days of a request by Ascentage to do so ([***]), Ascentage may initiate such action at its expense. Unity shall have the right to participate in any such action with counsel of its own choice at its own expense. All recoveries received by Ascentage from an Enforcement Action shall be first applied to reimburse Ascentage's and then Unity's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringement of the Licensed Patents, be split [***].

7.2.3 Other Instances of Infringement. With respect to any such infringing activity that does not involve the manufacture, use or sale by a Third Party of a Competitive Product, Ascentage shall have the sole right, at its sole option, to bring suit to enforce any Licensed Patent, and/or to defend any declaratory judgment action with respect thereto and to retain all recoveries received by Ascentage in connection therewith.

7.3 Infringement Claims Against Unity. If the production, sale or use of a Licensed Product pursuant to this Agreement results in any claim, suit or proceeding alleging patent infringement against Unity (or its Affiliates or sublicensees), Unity shall promptly notify Ascentage thereof in writing setting forth the facts of such claim in reasonable detail. As between the Parties, Unity will be entitled to control the defense in any such action(s). Unity agrees to keep Ascentage reasonably informed of all material developments in connection with any such claim, suit or proceeding as it relates to the Licensed Intellectual Property. Notwithstanding the above, Unity shall not admit the invalidity of any Licensed Patent without written consent from Ascentage.

7.4 Cooperation. In any legal action undertaken by a Party pursuant to Sections 7.2 or 7.3 of this Agreement (the Party bringing or defending such legal action, the "Enforcing Party"), the non-Enforcing Party shall cooperate fully with the Enforcing Party, including without limitation by joining as a party plaintiff if necessary for legal standing and executing such documents as the Enforcing Party may reasonably request. Upon the request of, and at the expense of, the Enforcing Party, the non-Enforcing Party shall make available at reasonable times and under appropriate conditions all relevant personnel, records, papers, information, samples, specimens and other similar materials in its possession.

7.5 No Implied Obligations. Except as expressly provided in this Article 7, neither Party has any obligation to bring or prosecute actions or suits against any Third Party for patent infringement.

7.6 UM License Agreement. Notwithstanding the foregoing provisions of this Article 7, with respect to the Licensed Patents subject of the UM License Agreement, Unity's rights under this Article 7 shall be limited to the extent of Ascentage's rights to prosecute and enforce such Licensed Patents under the UM License Agreement, provided that (a) with respect to Licensed Product-Specific Patents that have been in-licensed from UM, to the extent the UM License Agreement will not permit Unity to control the prosecution of such patents, Ascentage agrees to (i) share with Unity the information Ascentage receives from UM under Section 7.2 of the UM License Agreement with respect to such patents, (ii) provide Unity with a reasonable opportunity to review and comment upon such information; and (iii) pass along to UM Unity's comments and requested actions, and (b) Ascentage shall at Unity's request and expense cooperate with Unity in order exercise the enforcement rights granted to Ascentage under Section 8.1 of the UM License Agreement, in each case permitted by the UM License Agreement.

ARTICLE 8
OPTION FOR CHINA JOINT VENTURE

8.1 Option for China JVCO. Unity shall grant to Ascentage an option to commercialize Licensed Products in Greater China jointly with Unity through the joint venture entity ("China JVCO") to be established in accordance with Section 8.4 of the Library Agreement ("JVCO Option"). The process for exercise of the JVCO Option and all documents relating to China JVCO shall be agreed upon by [***] and [***] within [***] following the execution of the Library Agreement.

8.2 Limitation of Obligations; Certain Covenants.

8.2.1 Notwithstanding anything to the contrary, nothing in this Agreement shall be deemed to have granted Unity or any of its sublicensees the right to develop, manufacture, distribute, sell or otherwise commercialize the Licensed Products in the Greater China.

8.2.2 Ascentage hereby covenants that it shall not develop, manufacture, distribute, sell or otherwise commercialize the Licensed Compound (including any Licensed Products containing the Licensed Compound) in the Greater China except through the China JVCO. In the event of a breach by Ascentage of its obligations under this Section 8.2.2, the [***] and [***] shall [***].

8.2.3 Unity and Ascentage hereby covenant that they shall cooperate with respect to the establishment of the China JVCO, including without limitation by (a) initiating negotiation of the form agreements relating to the JVCO within [***] of the effective date of the Library Agreement, (b) using commercially reasonable efforts to reach agreement on such form agreements within [***] ([***]) [***] of the effective date of the Library Agreement, including ensuring that [***] and [***] devote at least [***] to such negotiations until such form agreements are agreed upon, and (c) signing the agreements for establishment of the China JVCO agreed upon by [***] and [***].

ARTICLE 9
CONFIDENTIALITY

9.1 Confidential Information. Except as otherwise expressly provided herein, the parties agree that the receiving party shall not, except as expressly provided in this Article 9, disclose to any Third Party or use for any purpose any information which is disclosed to it by the other party, whether orally or in writing, and identified as confidential ("Confidential Information"), except to the extent that it can be established by the receiving party by competent proof that such information:

(a) Was already known to the receiving party, other than under an obligation of confidentiality, at the time of disclosure;

(b) Was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving party;

(c) Became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this Agreement;

(d) Was independently developed by the receiving party without reference to information provided by the disclosing party as demonstrated by documented evidence prepared contemporaneously with such independent development; or

(e) Was disclosed to the receiving party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the disclosing party not to disclose such information to others.

9.2 Permitted Use and Disclosures. Each party hereto may use or disclose Confidential Information of the other party to the extent such use or disclosure is reasonably necessary in the following instances: (a) exercising the rights granted to it hereunder (including, in the case of Unity, developing, commercializing and/or sublicensing of Licensed Products) or in carrying out its obligations hereunder; (b) filing or prosecuting Patents as permitted by this Agreement;

(a) prosecuting or defending litigation; and (d) complying with applicable court orders or governmental regulations. Notwithstanding the foregoing, in the event a party is required to make a disclosure of the other party's Confidential Information pursuant to clause (c) or (d) of this Section 8.2, it will, except where impracticable, give reasonable advance notice to the disclosing party of such disclosure and use efforts to secure confidential treatment of

such information at least as diligent as such party would use to protect its own confidential information, but in no event less than reasonable efforts. In addition, Unity shall have the right to disclose Confidential Information regarding the Licensed Compound or Licensed Products to Third Parties in connection with due diligence or similar investigations, to potential Third Party investors, and others on a need to know basis, in each case under terms of confidentiality that are appropriate for the circumstances, or to the extent required by law.

9.3 Nondisclosure of Terms. Each of the parties hereto agrees not to disclose the terms of this Agreement to any Third Party without the prior written consent of the other party hereto, which consent shall not be unreasonably withheld; provided that a party may disclose the terms of this Agreement without such consent to such party's attorneys and advisors, to Third Parties in connection with due diligence or similar investigations, to potential Third Party investors, and others on a need to know basis, in each case under terms of confidentiality that are appropriate for the circumstances, or to the extent required by law.

9.4 Public Announcement. Unity may, in its discretion, issue a press release announcing the formation of this Agreement, which shall be substantially in a form approved by Ascentage prior to execution of the Agreement. Except with respect to such initial release or as otherwise required by law, neither party shall issue an additional press release or public announcement relating to this Agreement without the prior written approval of the other party, which shall not be withheld unreasonably. Either party may refer to the license granted under this Agreement in promotional and other communications with prospective customers and investors, subject to the prior written approval of the other party of the form, substance and intended use of such reference, and provided that such disclosure shall not include any technical details or any financial terms of the license. For purposes of clarification, after a party has obtained the other party's written approval of the form, substance and intended use of a particular reference, no further approval of the other party will be required for inclusion of the same reference in future communications that are intended for the same use.

ARTICLE 10
INDEMNIFICATION

10.1 Unity. Unity agrees to indemnify and defend Ascentage and its directors, officers, employees, agents and their respective successors, heirs and assigns (the "Ascentage Indemnitees") against any losses, costs, claims, damages, liabilities or expense (including reasonable attorneys' and professional fees and other expenses of litigation) (collectively, "Liabilities") arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, to the extent (a) relating to Licensed Products developed, manufactured, used, sold or otherwise distributed by or on behalf of Unity, its Affiliates, sublicensees or other designees (excluding Ascentage, its Affiliates and licensees) including, without limitation, product liability and patent infringement claims, or (b) resulting from a breach by Unity of its representations and warranties under this Agreement, except, in each case, to the extent such Liabilities result from the negligence or intentional misconduct of Ascentage or Ascentage's breach of its representations and warranties under this Agreement, including without limitation its product warranties under Section 1.13 of Schedule 4.1.

10.2 Ascentage. Ascentage agrees to indemnify and defend Unity and its directors, officers, employees, agents and their respective heirs and assigns (the "Unity Indemnitees") against any Liabilities arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, to the extent resulting from a breach by Ascentage of its representations and warranties under this Agreement, including without limitation its product warranties under Section 1.13 of Schedule 4.1, except, in each case, to the extent such Liabilities result from the negligence or intentional misconduct of Unity or Unity's breach of its representations and warranties under this Agreement.

10.3 Procedure. In the event that any party intends to claim indemnification under this Article 10 (each such party, an "Indemnitee") it shall promptly notify the other Party in writing of such alleged Liability. The indemnifying Party shall have the right to control the defense thereof with counsel of its choice as long as such counsel is reasonably acceptable to Indemnitee; provided, however, that any Indemnitee shall have the right to retain its own counsel at its own expense, for any reason, including if representation of any Indemnitee by the counsel retained by the indemnifying Party would be inappropriate due to actual or potential differing interests between such Indemnitee and any other Party reasonably represented by such counsel in such proceeding. The indemnifying Party shall keep the Indemnitee regularly informed of the status of the defense of any action, claim or liability covered by this Article 10 and shall take into consideration the Indemnitee's reasonable comments thereon. The affected Indemnitee shall cooperate with the indemnifying Party and its legal representatives in the investigation of any action, claim or liability covered by this Article 10. The Indemnitee shall not compromise or settle any claim or suit, or voluntarily incur any expense with respect to any such claim or suit, in each case, without the prior written consent of the indemnifying Party, which such Party shall not be required to give. The failure to deliver written notice to the indemnifying Party within a reasonable time after the commencement of any action with respect to any action, claim or liability covered by this Article 10, if prejudicial to its ability to defend such action, shall relieve the indemnifying Party of any liability to the Indemnitee under this Article 10.

ARTICLE 11
REPRESENTATIONS AND WARRANTIES

11.1 General Warranties. Each Party represents and warrants to the other Party that it is a corporation duly organized and validly existing under the laws of the state or country of its incorporation, the execution, delivery and performance of this Agreement by such Party has been duly authorized by all requisite corporate action, and it has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder (including, in the case of Ascentage, granting the rights and licenses described in Article 2).

11.2 Ascentage Warranties. Ascentage represents and warrants on its own behalf and on behalf of its Affiliates that as of the Effective Date:

(a) except as otherwise disclosed to Unity in writing prior to the Effective Date, (i) Ascentage has not received written notice from a Third Party claiming that the Licensed Compound infringes the intellectual property rights of any Third Party, and (ii) Ascentage is not a party to any legal action, suit or proceeding relating to the Licensed Compound.

(b) except as otherwise disclosed to Unity in writing prior to the Effective Date, there are no actual or pending actions, suits or claims, by any Third Party (i) challenging the ownership of the Licensed Compound; or (b) challenging the validity, effectiveness, enforceability, or ownership of the Licensed Intellectual Property.

(c) except as otherwise disclosed to Unity in writing prior to the Effective Date, the Licensed Patents are subsisting, in force or pending, as the case may be, and are not the subject of any interference, reissue, reexamination, opposition, cancellation or similar administrative proceedings.

(d) except as otherwise disclosed to Unity in writing prior to the Effective Date, Ascentage has not brought a claim alleging an infringement by a Third Party of any of the Licensed Patents and to Ascentage's actual knowledge, there is no actual or alleged infringement by a Third Party of any of the Patents within the Licensed Patents.

(e) there are no Patents: (a) filed by Ascentage and subsequently assigned to Third Party, or (b) with respect to which Ascentage or its Affiliates have acquired rights from a Third Party (i.e., through in-licenses, cross-licenses or otherwise), in each case that (i) would be required for Unity to research, develop, manufacture, use or commercialize the Licensed Compound and (ii) are not included within the Licensed Intellectual Property.

(f) except as otherwise disclosed to Unity in writing prior to the Effective Date, there are no actual or pending suits or claims by any Third Party asserting that the manufacture, use, sale, offer for sale or importing of the Licensed Compound infringes the intellectual property of a Third Party and to Ascentage's knowledge, the development and commercialization of the Licensed Compound would not infringe (i) any issued Patents of any Third Party (other than Patents in-licensed from UM), or (ii) any published Patent claim of any Third Party (other than claims of Patents in-licensed from UM) if such claim were to issue as published.

(g) Ascentage has disclosed to Unity all material agreements with Third Parties in effect as of the Effective Date pursuant to which Licensed Intellectual Property was licensed, acquired or sold, including without limitation all amendments to the UM License Agreement entered into by UM and Ascentage subsequent to the effective date of the License Agreement.

(h) Ascentage has not previously granted and will not grant any rights in the Licensed Intellectual Property that are inconsistent with the rights and licenses granted to Unity herein.

11.3 Certain Rights and Obligations under the UM License Agreement.

(a) Ascentage shall not modify, amend or otherwise alter the UM License Agreement to the extent the same would materially and adversely affect Unity's rights under this Agreement.

(b) Ascentage shall not (a) exercise or fail to exercise any right under the UM License Agreement or (b) provide or fail to provide any consent or approval with respect

to any right or obligation under the UM License Agreement, in each case to the extent the same would materially and adversely affect Unity's rights under this Agreement.

(c) Ascentage shall not unilaterally terminate the UM License Agreement.

11.4 Disclaimer. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTIES TO THE OTHER PARTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, REGARDING THE LICENSED COMPOUND, LICENSED PRODUCTS OR THE LICENSED INTELLECTUAL PROPERTY, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, AND VALIDITY OF LICENSED INTELLECTUAL PROPERTY CLAIMS, ISSUED OR PENDING.

11.5 Limitation of Liability. EXCEPT FOR LIABILITY FOR BREACH OF ARTICLE 9, NEITHER PARTY SHALL BE ENTITLED TO RECOVER FROM THE OTHER PARTY ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH THIS AGREEMENT; *provided, however,* that this Section 11.5 shall not be construed to limit either party's indemnification obligations under Article 10.

ARTICLE 12
TERM AND TERMINATION

12.1 Term. The term of this Agreement shall commence on the Effective Date and, unless earlier terminated as provided in this Article 12, shall continue in full force and effect on a country-by-country basis until the expiration of all royalty obligations pursuant to this Agreement for such country, as provided in Section 5.4 above. Unity's license with respect to the Licensed Technology shall survive the expiration (but not an earlier termination) of this Agreement, provided that such license shall thereafter become nonexclusive and fully paid-up.

12.2 Termination for Breach. Either Party may terminate this Agreement in the event that the other Party shall have materially breached or defaulted in the performance of any of its material obligations hereunder, and such breach or default shall have continued for sixty (60) days after written notice of such breach and intent to terminate this Agreement therefor was provided to the breaching Party by the nonbreaching Party. Any such termination shall become effective at the end of such sixty (60) day period unless the breaching Party has cured any such breach or default prior to the expiration of the sixty (60) day period. Notwithstanding the foregoing, if the Party alleged to be in breach of this Agreement in good faith disputes such breach within such sixty (60) day period, the nonbreaching Party shall not have the right to terminate this Agreement unless it has been determined by arbitration pursuant to Section 13.2 that this Agreement was materially breached, and the breaching Party fails to comply with its obligations hereunder within sixty (60) days after such determination.

12.3 Termination by Unity. Any provision herein notwithstanding, Unity may terminate this Agreement, in its entirety or as to any particular Patent within the Licensed Patents, or as to any particular Licensed Product, at any time by giving Ascentage at least ninety (90) days prior

written notice. From and after the effective date of a termination under this Section 12.3 with respect to a particular Patent in a particular country, such Patent shall cease to be within the Licensed Patents for all purposes of this Agreement, and all rights and obligations of Unity with respect to such Patent(s) shall terminate. From and after the effective date of a termination under this Section 12.3 with respect to a particular Licensed Product, the license granted under Section 2.1 above shall terminate with respect to such Licensed Product, and the same shall cease to be a Licensed Product for all purposes of this Agreement. Upon a termination of this Agreement in its entirety under this Section 12.3, all rights and obligations of the parties shall terminate, except as provided in Section 12.4 below. For clarity, Unity shall remain obligated to pay any and all milestone and other payments accrued, due and payable to Ascentage prior to such termination.

12.4 Effect of Termination.

12.4.1 Accrued Obligations. Expiration or any termination of this Agreement shall not release either Party hereto from any liability which at the time of such expiration or termination has already accrued to such Party or which is attributable to a period prior to such expiration or termination, subject to the terms of this Agreement, nor preclude either Party from pursuing any rights and remedies it may have hereunder or at law or in equity which accrued to it prior to such expiration or termination, subject to the terms of this Agreement.

12.4.2 Sales of Existing Inventory of Licensed Product. In the event this Agreement is terminated for any reason with respect to a Licensed Product after the first approval of an MAA for such Licensed Product, Unity shall provide Ascentage with a written inventory of all quantities of such Licensed Product that Unity and its Affiliates have in stock and, for a period of [***] ([***]) [***] after such termination, Unity and its Affiliates shall have the right to sell or otherwise dispose of such Licensed Product, all subject to the payment to Ascentage of royalties pursuant to Article 5 hereof.

12.4.3 Survival of Sublicenses. Upon termination of this Agreement for any reason, any sublicense granted by Unity hereunder to a Third Party Sublicensee shall survive, provided that such Third Party Sublicensee continues to pay to Ascentage the milestones and royalties that would have been due to Ascentage under this Agreement based on such Third Party Sublicensee's activities had this Agreement not terminated. For clarity, in the event that a Third Party Sublicensee fails to pay to Ascentage the applicable milestones and royalties due to Ascentage based on such Third Party Sublicensee's activities, Ascentage shall be entitled to terminate such surviving sublicense by providing such Third Party Sublicensee written notice of termination, which notice shall take effect [***] ([***]) days after it is received by such Third Party Sublicensee unless such Third Party Sublicensee has cured any such breach or default prior to the expiration of the [***] ([***]) day period.

12.4.4 Library Agreement. This Agreement is independent of, and shall not be affected by, the expiration or termination of the Library Agreement, and vice versa.

12.4.5 Survival. Articles 1 (Definitions), 6 (Accounting; Records; Method of Payment), 9 (Confidentiality), 10 (Indemnification), 13 (Dispute Resolution) and 14 (Miscellaneous) and Sections 7.2.1 (with respect to any ongoing Enforcement Action), 11.3, 11.4 and 12.4 shall survive the expiration or termination of this Agreement for any reason. Except as

otherwise provided in this ARTICLE 12, all rights and obligations of the parties under this Agreement shall terminate upon the expiration or termination of this Agreement.

ARTICLE 13
DISPUTE RESOLUTION

13.1 Dispute Resolution. If an unresolved dispute arises out of or relates to this Agreement, or the breach thereof, either Party may refer such dispute to the [***] of Unity and Ascentage, who shall meet in person or by telephone within [***] ([***]) days after such referral to attempt in good faith to resolve such dispute. If such matter cannot be resolved by discussion of such officers within such [***] ([***]) days period (as may be extended by mutual agreement), either Party shall be entitled to seek resolution of such dispute pursuant to Section 13.2 below.

13.2 Arbitration. If the parties are unable to resolve a dispute on an issue of interpretation, breach or enforcement of this Agreement, the parties shall refer such dispute to be finally resolved by binding arbitration under the terms of this Section 13.2, except that all disputes with respect to the validity or infringement of Patents shall be subject to applicable federal court jurisdiction and not subject to the terms of this Section 13.2. Whenever a party shall decide to institute arbitration proceedings, it shall give written notice to that effect to the other party. Any such arbitration shall be conducted under the [***] by a panel of three (3) arbitrators in [***]. Each party shall select one (1) arbitrator who is not employed by, or otherwise affiliated with, such party within [***] ([***]) days after the institution of arbitration proceedings, and the two (2) arbitrators so selected shall designate the third arbitrator. The parties shall use their commercially reasonable efforts to conclude the arbitration hearings within [***] ([***]) [***] following the confirmation of the third and presiding arbitrator.

13.3 Injunctive Relief. Each Party shall be free to seek preliminary or permanent injunctive relief, restraining order or degree of specific performance in any court of competent jurisdiction. For avoidance of doubt, any such equitable remedies provided under this Section 13.3 shall be cumulative and not exclusive and are in addition to any other remedies, which either Party may have under this Agreement or applicable law.

ARTICLE 14
MISCELLANEOUS

14.1 Governing Laws. This Agreement and any dispute arising from the construction, performance or breach hereof shall be governed by and construed, and enforced in accordance with, the laws of the state of New York, USA, without reference to conflicts of laws principles.

14.2 Waiver. It is agreed that no waiver by either Party hereto of any breach or default of any of the covenants or agreements herein set forth shall be deemed a waiver as to any subsequent and/or similar breach or default.

14.3 Assignment. This Agreement shall not be assignable by either party without the written consent of the other party hereto, except that either party may assign this Agreement, without such consent, to an entity that acquires all or substantially all of the business or assets of such party to which this Agreement relates, whether by merger, reorganization, acquisition, sale, or otherwise; provided, however, that within [***] ([***]) days of such an assignment, the assignee

shall agree in writing to be bound by the terms and conditions of this Agreement. Subject to the foregoing, this Agreement shall bind and inure to the benefit of each party's successors and permitted assigns.

14.4 Independent Contractors. The relationship of the Parties hereto is that of independent contractors. The Parties hereto are not deemed to be agents, partners or joint venturers of the others for any purpose as a result of this Agreement or the transactions contemplated thereby.

14.5 Compliance with Laws. In exercising their rights under this Agreement, the Parties shall fully comply in all material respects with the requirements of any and all applicable laws, regulations, rules and orders of any governmental body having jurisdiction over the exercise of rights under this license including, without limitation, those applicable to the discovery, development, manufacture, distribution, import and export and sale of Licensed Products pursuant to this Agreement.

14.6 Notices. All notices, requests and other communications hereunder shall be in writing and shall be personally delivered or by registered or certified mail, return receipt requested, postage prepaid, in each case to the respective address specified below, or such other address as may be specified in writing to the other Parties hereto and shall be deemed to have been given upon receipt:

If to Unity: Unity Biotechnology, Inc.
1700 Owens Street, Suite 535
San Francisco, CA 94158, USA
Attention: [***]
Email: [***]

If to Ascentage: Ascentage Pharma Group Corp. Ltd.
Room 201, QB3 Building, Medical City Avenue
Hi-Tech BioMed District, Taizhou City, Jiangsu Province
P.R. China, 225300
Attention: [***]
Email: [***]

14.7 Severability. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect to the fullest extent permitted by law without said provision, and the Parties shall amend the Agreement to the extent feasible to lawfully include the substance of the excluded term to as fully as possible realize the intent of the Parties and their commercial bargain.

14.8 Advice of Counsel. Unity and Ascentage have each consulted counsel of their choice regarding this Agreement, and each acknowledges and agrees that this Agreement shall not be deemed to have been drafted by one Party or another and will be construed accordingly.

14.9 Performance Warranty. Each Party hereby warrants and guarantees the performance of any and all rights and obligations of this Agreement by its Affiliates, licensees and sublicensees.

14.10 Force Majeure. Neither Party shall lose any rights hereunder or be liable to the other Party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting Party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, unusual and unexpected governmental intervention, failure of suppliers, or any other reason where failure to perform is beyond the reasonable control and not caused by the negligence, intentional conduct or misconduct of the non-performing Party and such Party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a Party be required to settle any labor dispute or disturbance.

14.11 Complete Agreement. This Agreement with its schedules, together with the Library Agreement and its exhibits, constitutes the entire agreement, both written and oral, between the Parties with respect to the subject matter hereof, and all prior agreements respecting the subject matter hereof, either written or oral, express or implied, shall be abrogated, canceled, and are null and void and of no effect. No amendment or change hereof or addition hereto shall be effective or binding on either of the Parties hereto unless reduced to writing and executed by the respective duly authorized representatives of Unity and Ascentage.

14.12 Headings. The captions to the several Sections and Articles hereof are not a Part of this Agreement, but are included merely for convenience of reference and shall not affect its meaning or interpretation.

14.13 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same agreement.

14.14 Bankruptcy. All rights and licenses granted under or pursuant to this Agreement by each Party as a licensor are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title ll, U.S. Code (the "Bankruptcy Code"), licenses of rights to "intellectual property" as defined under section 101(35A) of the Bankruptcy Code. The Parties agree that each licensee of such rights under this Agreement, shall retain and may fully exercise all rights and elections it would have in the case of a licensor bankruptcy under the Bankruptcy Code. Each Party agrees during the term of this Agreement to create or maintain current copies, or if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such intellectual property licensed to the other Party.

IN WITNESS WHEREOF, the Parties hereto have caused their duly authorized representatives to execute this Agreement.

ASCENTAGE PHARMA GROUP CORP. LTD.	UNITY BIOTECHNOLOGY, INC.
By:	By:
Name: Dajun Yang, MD, PhD	Name: Nathaniel David, PhD
Title: Chief Executive Officer	Title: Chief Executive Officer

Schedule 1.11 – Licensed Compound
Schedule 3.3 – Back-up Compound
Schedule 4.1 – Supply Terms

SCHEDULE 1.11

LICENSED COMPOUND

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

SCHEDULE 3.3

BACK-UP COMPOUND

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).
Confidential treatment has been granted with respect to the omitted portions.**

SCHEDULE 4.1

SUPPLY TERMS

1.1 Product Supply. Ascentage shall supply Unity, its Affiliates and Sublicensees with such quantities of Clinical Materials and Licensed Compound as Unity, its Affiliates and Sublicensees may order from time-to-time during the term of the Agreement.

1.2 Clinical Supplies. Unity shall be entitled to order quantities of Clinical Materials and Licensed Compound for use in clinical trials and for development purposes (e.g., stability studies and other analytical purposes) in accordance with the terms of this Section 1.2.

(a) Clinical Materials. As used herein, "Clinical Materials" shall means Licensed Product that has been manufactured, labeled and packaged in compliance with applicable laws relating to experimental materials to be administered to human test subjects.

(b) Prior to completion of Phase II Clinical Trial. Prior to the completion of the first Phase II Clinical Trial carried out by Unity, its Affiliates and Sublicensees with respect to the Licensed Product, Ascentage shall supply to Unity the quantities of Clinical Materials that Unity may order from time-to-time order from Ascentage in accordance with this Section 1.2.

(c) After completion of Phase II Clinical Trial. Following completion of the first Phase II Clinical Trial carried out by Unity, its Affiliates and Sublicensees with respect to the Licensed Product, Ascentage shall supply to Unity the quantities of (i) Clinical Materials and/or (ii) Licensed Compound, that Unity may order from time-to-time order from Ascentage in accordance with this Section 1.2, in each case for use by Unity, its Affiliates and Sublicensees in carrying out additional clinical studies of the Licensed Product.

(d) Procedures. Unity shall periodically submit purchase orders to Ascentage for quantities of Clinical Materials and/or Licensed Compound, which purchase orders shall set forth the specific quantities needed, requested delivery date and shipping instructions. Such purchase orders shall be submitted to Ascentage with a minimal lead time [***]. Ascentage shall supply the quantities of Clinical Materials and/or Licensed Compound ordered by Unity by the delivery date designated by Unity in the relevant purchase order provided such order has been placed by Unity with at least the minimum lead time [***]. Ascentage does not guarantee fulfillment of any purchase orders less than the minimal lead time, however Ascentage will use commercially reasonable efforts to fulfill those purchase orders. No terms contained in any purchase order, order acknowledgment or similar standardized form shall be construed to amend or modify the terms of this Schedule 4.1 and in the event of any conflict, this Schedule 4.1 shall control, unless the Parties otherwise expressly agree in writing.

1.3 Commercial Supply. Unity shall be entitled to order quantities Licensed Compound for use in the manufacture of Licensed Product for commercial use in accordance with the terms of this Section 1.3.

(a) Rolling Forecasts. At least [***] ([***]) [***] prior to the first calendar quarter for which Unity will order commercial supplies of Licensed Compound, and thereafter at

least [***] ([***]) [***] prior to the start of each subsequent calendar quarter, Unity shall provide Ascentage with an updated rolling written forecast of the quantities of the Licensed Compound estimated to be required on a month-by-month basis during the first calendar quarter for which Unity will order commercial supplies of the Licensed Compound for sale in the Unity Territory ("Q1") and the next three (3) quarters ("Q2", "Q3", "Q4", respectively). Unity shall only be obligated to purchase, and Ascentage shall only be obligated to supply, the quantities of Licensed Compound set forth in such forecast to the extent provided in Section 1.3(b) below.

(b) Orders.

(i) Orders. Together with each forecast provided under Section 1.3(a) above (the "Current Forecast"), Unity shall place its purchase order with Ascentage for delivery in Q1 of that quantity of Licensed Compound equal to the greater of: (i) the quantity of Licensed Compound reflected for Q1 in the Current Forecast; (ii) [***] percent ([***]%) of the quantity forecast for Q2 in the forecast provided under Section 1.3(a) above for the immediately preceding calendar quarter (the "First Preceding Forecast"); and (iii) [***] percent ([***]%) of the quantity forecast for Q3 in the forecast immediately preceding the First Preceding Forecast (the "Second Preceding Forecast"). Ascentage shall accept such orders from Unity, subject to the remaining terms and conditions of this Agreement, provided that Ascentage shall not be obligated to accept orders for Q1 to the extent the quantity ordered exceeds the lesser of: (i) [***] percent ([***]%) of the quantity forecast for Q2 in the First Preceding Forecast; and (ii) [***] percent ([***]%) of the quantity forecast for Q3 in the Second Preceding Forecast, but shall use good faith efforts to fill orders for such excess quantities from available supplies.

(ii) Form of Order.

(1) Unity's orders shall be made pursuant to a purchase order which is in a form mutually acceptable to the Parties, and shall provide for shipment in accordance with reasonable delivery schedules as agreed upon from time to time by Ascentage and Unity. Unless otherwise agreed, each order shall be for a minimum of [***] ([***]) [***]. Ascentage shall accept all purchase orders delivered by Unity in accordance with this Schedule 4.1, and shall notify Unity within [***] ([***]) days from receipt of an order of its ability to fill any amounts of such order in excess of the quantities that Ascentage is obligated to supply.

(2) Notwithstanding the foregoing, during the period between the submission of the first purchase order for Licensed Compound under this Section 1.3 and [***] ([***]) months thereafter ("Ramp-Up Period"), Unity may order Product in any mutually agreed quantities provided that the timing of manufacture and delivery of such quantities of Licensed Compound, as well as the minimum remaining shelf life (as defined in Section 1.7) of such Licensed Compound at the time of delivery to Unity, shall be subject to mutual agreement on an order-by-order basis. The Parties shall reasonably cooperate during the Ramp-Up Period to coordinate Ascentage's manufacturing of other quantities with Unity's orders during the Ramp-Up Period.

(3) No terms contained in any purchase order, order acknowledgment or similar standardized form shall be construed to amend or modify the terms of

this Agreement and in the event of any conflict, this Agreement shall control, unless the Parties otherwise expressly agree in writing.

1.4 Delivery. With respect to exact shipping dates, Ascentage shall [***] (a) ship the ordered quantities of Licensed Compound for commercial use on the dates specified in Unity's purchase orders submitted and accepted in accordance with Section 1.3(b) above or (b) for Clinical Materials and Licensed Compound for use in clinical trials, to ship quantities of the Clinical Materials and Licensed Compound ordered by Unity pursuant to Section 1.2, on the dates requested by Unity in accordance with such Section. All Clinical Materials and Licensed Compound for use in clinical trials ordered under Section 1.2, and Licensed Compound for commercial use ordered under Section 1.3(b) (such Clinical Materials and Licensed Compound, collectively "Products") will be delivered [***] (Incoterms 2010) named place of destination. Title and all risk of loss, delay or damage to the Products shall pass to Unity upon [***]. The shipping packaging shall be in accordance with good commercial practice and agreed by the Parties before shipment with respect to protection of the Product during transportation.

1.5 Specifications and Manufacturing Standards. Ascentage shall only release Product for shipment to Unity which complies with: (a) [***] ("Specifications"); and (b) [***] ("Manufacturing Standards"). Ascentage also agrees to meet the requirements of any regulatory authority in the Territory[***] as soon as reasonably practicable on the condition that: (i) Unity shall notify Ascentage of such requirements; and (ii) any increased cost to Ascentage associated with preparing for, coming into compliance with, and meeting such requirements shall be [***]. The Parties shall, at [***] before commencement of deliveries of the Product to Unity, conclude a separate quality agreement in a format suitable for submission to the Regulatory Authorities in all countries of the Territory, recording the agreed-upon Specifications and Manufacturing Standards and measures to assure compliance with cGMP regarding manufacturing, storage, transportation and release of Product ("Quality Agreement").

1.6 Inspection; Product Rejection. Unity shall, promptly upon receipt of each shipment of the Product, perform a customary inspection.

(a) Each shipment of the Product to Unity shall be accompanied by the following written documentation: (i) the date of manufacture; (ii) delivered amount of Product units; (iii) a certificate of conformance issued by an Ascentage qualified person; (iv) a certificate of analysis setting forth the results of tests performed by Ascentage as required by the Specifications and Manufacturing Standards and (v) any other documentation set forth in the Quality Agreement.

(b) If the Product supplied by Ascentage under this Agreement fails to conform to the applicable Specifications and Manufacturing Standards, Unity shall notify Ascentage no later than [***] ([***]) [***] after its receipt of the Product of such non-conformity and Unity shall immediately present reasonable evidence to Ascentage of such non-conformity. Except as provided in Section 1.6(c) below, if Unity fails to notify Ascentage within such [***] ([***]) [***] period of any non-conformity, the Product shall be deemed to conform to the applicable Specifications and Manufacturing Standards.

(c) Notwithstanding the last sentence of Section 1.6(b) above, if within [***] ([***]) [***] after Unity's receipt of any Product, Unity discovers any Latent Defects in such Product, Unity shall immediately notify Ascentage in writing and shall present reasonable evidence to Ascentage of such Latent Defects together with such notice. In such case, Ascentage shall replace Product in which such Latent Defects have been discovered in accordance with Section 1.6(d) below, it being understood that the foregoing shall not serve to limit Ascentage's obligations under Section 10.2 to indemnify Unity for Third Party Claims arising from a breach by Ascentage of its product warranties under Section 1.13 of this Schedule 4.1. For purposes of this Section 1.6, "Latent Defect(s)" shall mean any non-conformity of Product to the applicable Specifications and/or Manufacturing Standards at the time of the delivery of Product to Unity that [***]

(d) Ascentage shall replace, at no additional expense to Unity, any Product rejected by Unity pursuant to Section 1.6(b), or any Product in respect of which Unity notifies Ascentage a Latent Defect has been discovered in accordance with Section 1.6(c), as applicable, with new Product which does conform with the Specifications and Manufacturing Standards [***] after receipt of Unity's notification under Section 1.6(b) or Section 1.6(c), as applicable. The Parties may appoint a [***] to analyze any unit of the Product rejected by Unity under Section 1.6(b), or in respect of which Unity notifies Ascentage a Latent Defect has been discovered in accordance with Section 1.6(c), as applicable, and, if [***] that the Product was conforming, then Unity shall be responsible for payment for any such units of Product and any replacement Product shipped by Ascentage. Ascentage shall give Unity written instructions as to how Unity should, at Ascentage's expense, dispose of any non-conforming Product, and such instructions shall comply with all appropriate governmental requirements. The costs of any Third Party determination initiated under this Section 1.6(d) shall be borne by the non-prevailing party.

1.7 Shelf Life. Except as otherwise agreed pursuant to Section 1.3(b)(ii)(2), all Licensed Compound ordered by Unity pursuant to Section 1.3 (i.e., all Licensed Compound to be used in the manufacture of Licensed Product for commercial use) shall at the time of receipt by Unity or its designee, have a minimum shelf-life [***].

1.8 Documentation. Ascentage shall keep and maintain for a duration in accordance with applicable laws: (i) reference samples and quality control records for each batch of raw material and packaging material used in the manufacture of the Product; and (ii) manufacturing and quality control records for each batch of the Product.

1.9 Purchase Price.

(a) Unity shall pay to Ascentage a purchase price for each Product equal to the Cost of Goods Sold for such Product plus [***] percent ([***]%).

(b) "Cost of Goods Sold" or "COGS" means the cost of goods sold of Products ordered by Unity and supplied by or on behalf of Ascentage to Unity as follows:

(i) To the extent the Product is manufactured by a Third Party under contract with Ascentage, and supplied to Unity by Ascentage, the Cost of Goods Sold shall mean (1) [***] (2) [***].

(ii) To the extent the Product is manufactured or otherwise processed by Ascentage, Cost of Goods Sold shall mean Direct Expenses and Manufacturing Overhead incurred by Ascentage in, and reasonably allocable to, the manufacture of such Product.

(iii) As used herein:

(1) "Direct Expenses" are (A) [***], and (B) [***].

(2) "Manufacturing Overhead" consists of a [***] associated with the manufacture of quantities of Product, for supply to Unity[***] (A) [***], (B) [***], (C) [***], (D) [***], (E) [***], (F) [***], and (G) [***].

(b) Cost of Goods Sold shall be calculated consistent with [***], and shall be consistent from year-to-year. The methodology to be used in making the allocations for any costs included in Cost of Goods Sold shall upon request be reviewed by the Parties.

1.10 Facilities. Ascentage shall manufacture or have manufactured all Product at the Facility(ies) and in accordance with, and shall only release the Products for shipment to Unity which complies with: (i) the Specifications for the Products; and (ii) all applicable Manufacturing Standards and all requirements set forth in the Quality Agreement. As used in this Schedule 4.1, "Facility" shall mean Ascentage's or Ascentage's Third Parties contractors cGMP-compliant facilities through which the Products supplied to Unity are manufactured, processed, tested, stored or distributed.

1.11 Unity Right of Inspection. Ascentage shall, upon written request of Unity with reasonable advance notice, permit Unity's authorized representative, during normal working hours, to inspect (and if reasonably necessary, to copy) all manufacturing and quality control records for all manufacture of the Products.

1.12 Quality Audit. Unity shall be entitled, during normal working hours and upon reasonable prior notice to Ascentage, to inspect the Facility(ies), not more than once every [***], or if more frequent, at each variation of the manufacturing process for the Products. To that effect, Ascentage shall inform Unity of any variation to the manufacturing process of the Products in accordance with the Quality Agreement and as soon as reasonably practicable. Ascentage shall give Unity prior notice, to the extent practicable, of any inspections by the FDA, EMA or other regulatory authority in the Territory of the Facility(ies). Upon Unity's reasonable written request, Ascentage shall, to the extent Ascentage has the right to do so: (a) permit a representative of Unity to be present at such inspections; (b) disclose to Unity the results of any such inspection by the FDA, EMA or any other regulatory authority in the Territory to the extent related to the Products, but in no event shall Ascentage be obligated to disclose the results of any such inspection to the extent relating to any other product of Ascentage or its Affiliates and/or (c) implement any measures necessary to respond to the regulatory authorities in a satisfactory manner.

1.13 Product Warranties. Ascentage represents, warrants and covenants to Unity as follows:

(a) All Products supplied hereunder shall comply with all material and applicable laws and Manufacturing Standards and meet all Specifications in all material respects,

and Ascentage shall perform and document all manufacturing, processing, storage and supply activities with respect to Products supplied hereunder in compliance with all applicable laws.

(b) All Products supplied hereunder shall, at delivery to Unity or its designee, be in compliance in all respects with the minimum shelf-life requirements agreed upon as described in Section 1.7 of this Schedule 4.1.

(c) The Facility(ies), all equipment used for the manufacture of Products within the Facility(ies), and the activities contemplated herein will comply with all material and applicable laws and shall hold and maintain all governmental registrations, permits, licenses and approvals necessary for it to manufacture Products for Unity under this Agreement.

(d) Title to all Products delivered to Unity under this Agreement shall pass to Unity free and clear of any security interest, lien or other encumbrance.

1.14 Suppliers.

(a) Without limiting Ascentage's responsibility under this Agreement, Ascentage shall have the right at any time to satisfy its supply obligations to Unity hereunder either in whole or in part through arrangements with Third Parties engaged to perform services or supply facilities or goods in connection with the manufacture, testing, and/or packaging of Products; provided that Ascentage shall remain responsible for such activities to the same extent as if Ascentage had performed such activities itself. Ascentage shall give Unity prior written notice of any such arrangement [***] and such notice shall be provided sufficiently in advance to permit Unity to [***] at [***].

(b) Unity shall have the right at any time during the term to qualify and register a Third Party manufacturer of Unity's choosing to manufacture Licensed Compound and/or Licensed Product so long as Unity continues to obtain at least fifty percent (50%) of its overall requirements (on an annualized basis) from Ascentage of Licensed Product (in the case of pre-Phase III Clinical Trials) and Licensed Compound (in the case of Phase III Clinical Trials and commercial supply).

(c) Within a reasonable period from receiving written notice from Unity informing Ascentage of Unity's decision to qualify a Third Party manufacturer to produce Licensed Compound and/or Licensed Products and after such Third Party manufacturer has executed a reasonable and customary confidentiality agreement with Ascentage to Ascentage's reasonable satisfaction, Ascentage and Unity shall implement an appropriate exchange process and schedule for the transfer to Unity or a Third Party manufacturer of Unity's choosing of Technology that is necessary or useful for the manufacture of Licensed Compound and Licensed Products ("Manufacturing Technology") and thereafter shall transfer such Manufacturing Technology to such Third Party manufacturer in accordance with the agreed upon process and schedule. If after such initial transfer Unity identifies a particular item of Technology pertaining to the Licensed Compound and/or the manufacture thereof that is necessary or useful for the manufacture of Licensed Compound and Licensed Products but has not been previously transferred to Unity, Ascentage agrees to use reasonable efforts to provide the same to Unity in a reasonable time frame.

(d) In consideration for Ascentage's providing the forgoing transfer of Manufacturing Technology with respect to a given Product, Unity agrees to pay to Ascentage a one-time technology transfer fee. The technology transfer fee is meant to compensate Ascentage for the [***] and will be a one-time payment of [***]. Additionally, the Parties agree that following the establishment of such second source, the purchase price due to Ascentage with respect to quantities of Licensed Compound and/or Licensed Product purchased thereafter shall be the [***] of the [***] and the [***] ("Purchase Price Adjustment").

(e) Notwithstanding the foregoing, if Ascentage either materially breaches its obligations under the Supply Agreement or does not supply Unity with Licensed Compound or Licensed Product from [***] ([***]) or more orders submitted by Unity in accordance with Section 1.2(d) or 1.3(b) of this Exhibit 4.1 by the applicable delivery date, and in each case fails to cure such breach or supply failure within [***] ([***]) [***] of written notice from Unity, then (i) the requirement under Section 1.14(b) that Unity obtain at least fifty percent (50%) of its overall requirements from Ascentage of Licensed Compound and Licensed Product shall cease to apply, and (ii) any otherwise applicable Purchase Price Adjustment shall not apply.

1.15 Shortage of Supply.

(a) Cooperation. Ascentage and Unity shall cooperate to establish reasonable plans and procedures to avoid any shortage of supply of Products.

(b) Procedures. If at any time Ascentage becomes unable, or concludes that it will be unable, to supply Unity's requirements for the Products, Ascentage shall promptly notify Unity in writing. In such event, the Parties shall promptly convene to address the problem, including locating alternative suppliers and facilities to increase production and identifying other actions necessary to resolve the problem. Based on such interactions, the Parties shall reasonably agree on appropriate measures to remedy the shortage and shall promptly implement such measures. In any event, both Parties agree to respond with the level of speed and diligence commensurate with the severity of the problem.

(c) Allocation. If despite the foregoing measures Ascentage is unable to supply Unity's requirements of Product, Ascentage shall allocate the quantities of the Product that (i) Ascentage has in inventory [***], and (ii) Ascentage is able to produce [***].

1.16 Termination/Limitations of Minimum Purchase Obligations.

(a) It is understood and agreed that Unity's obligation to obtain at least fifty percent (50%) of its overall requirements of Licensed Compound and Licensed Product from Ascentage is expressly conditioned upon Ascentage achieving and maintaining [***] with respect to [***] of the manufacture of pharmaceutical products. In the event that Unity determines that it would be preferable to have one or more Third Party manufacturers assume responsibility for the manufacture of the majority (or all) of Unity's requirements of Licensed Compound and Licensed Product based on such Third Party manufacturer(s) being [***] with respect to [***], then Unity will so inform Ascentage in writing, explaining to Ascentage the basis of its decision and citing the factor(s) with respect to which it has concluded the Third Party manufacturer is [***]. Upon Unity's delivery to Ascentage of such written notice, the requirement under Section 1.14(b) that

Unity obtain at least fifty percent (50%) of its overall requirements from Ascentage of Licensed Compound and Licensed Product shall cease to apply. For clarity, it is understood that Unity's determination regarding the [***] of a Third Party manufacturer with respect to [***] (i.e., [***] of the manufacture) shall be [***] that it shall [***] to have one or more Third Party manufacturers assume responsibility for the manufacture of the majority (or all) of Unity's requirements of Licensed Compound and Licensed Product.

(b) It is further agreed that in the event that Unity sublicenses the commercialization of a Licensed Product to a Third Party commercialization partner, notwithstanding anything to the contrary in this Exhibit 4.1, such commercialization partner shall be free to manufacture its requirements of such Licensed Product (including the Licensed Compound contained therein) and that any quantities of Licensed Product and/or Licensed Compound manufactured by or on behalf of such Third Party commercialization partner shall not be taken into account when determining Unity's overall requirements of Licensed Compound and Licensed Product for purposes of minimum purchase obligation in Section 1.14(b) above.

(c) Upon a Change of Control of Unity, the minimum purchase obligations set forth in Section 1.14(b) shall immediately terminate. As used herein, "Change of Control" means (i) the acquisition of Unity by another entity by means of any transaction or series of related transactions to which Unity is party (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any sale of stock for capital raising purposes) other than a transaction or series of related transactions in which the holders of the voting securities of Unity outstanding immediately prior to such transaction or series of related transactions retain, immediately after such transaction or series of related transactions, as a result of shares in Unity held by such holders prior to such transaction or series of related transactions, at least a majority of the total voting power represented by the outstanding voting securities of Unity or such other surviving or resulting entity (or if Unity or such other surviving or resulting entity is a wholly-owned subsidiary immediately following such acquisition, its parent) or (ii) a sale, lease or other disposition of all or substantially all of the assets of Unity and its subsidiaries taken as a whole by means of any transaction or series of related transactions, except where such sale, lease or other disposition is to a wholly-owned subsidiary of Unity.

EXECUTION COPY
CONFIDENTIAL

EXHIBIT 3.4.2

DILIGENCE REQUIREMENTS

Ascentage shall use commercially reasonable efforts to develop and obtain marketing approval for each Compound that it designates as a Development Candidate, and thereafter shall use commercially reasonable efforts to launch and commercialize each such Compound [***].

Without limiting the foregoing, Ascentage agrees that:

- [***]; and

- [***].

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

EXHIBIT 6.1

FORM OF STOCK ISSUANCE AGREEMENT; CAPITALIZATION TABLE FOR UNITY

Part A: Form of Stock Issuance Agreement

UNITY BIOTECHNOLOGY, INC.

RESTRICTED STOCK GRANT AGREEMENT

This Restricted Stock Grant Agreement (the "**Agreement**") is made as of [●] by and between Unity Biotechnology, Inc., a Delaware corporation (the "**Company**"), and Ascentage Pharma Group Corp. Ltd. (the "**Grantee**").

In consideration of the mutual covenants and representations set forth below, the Company and Grantee agree as follows:

1. *Grant of the Shares*. Subject to the terms and conditions of this Agreement, the Company agrees to grant to Grantee, and Grantee agree to acquire from the Company, on the Closing (as defined below) [●] shares of the Company's Common Stock, $0.0001 par value per share (the "**Shares**"), as consideration for services to be provided by Grantee to the Company.

2. *Closing*. The transfer of the Shares shall occur at a closing (the "**Closing**") to be held on the date first set forth above, or at any other time mutually agreed upon by the Company and Grantee. The Closing will take place at the principal office of the Company or at such other place as shall be designated by the Company. As promptly after the Closing as practicable, the Company will issue a stock certificate, registered in the name of Grantee, reflecting the Shares.

3. *Restrictions on Transfer.*

A. *Investment Representations and Legend Requirements.* The Grantee hereby make the investment representations listed on **Exhibit A** to the Company as of the date of this Agreement and as of the date of the Closing, and agrees that such representations are incorporated into this Agreement by this reference, such that the Company may rely on them in issuing the Shares. Grantee understand and agree that the Company shall cause the legends set forth below, or substantially equivalent legends, to be placed upon any certificate(s) evidencing ownership of the Shares, together with any other legends that may be required by the Company or by applicable state or federal securities laws:

> THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF

ANY STATE, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SUCH ACT AND/OR APPLICABLE STATE SECURITIES LAWS, OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL OR OTHER EVIDENCE, REASONABLY SATISFACTORY TO THE COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER, A RIGHT OF FIRST REFUSAL, AND A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE RESTRICTED STOCK GRANT AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS, RIGHT OF FIRST REFUSAL AND LOCK-UP PERIOD ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

B. *Stop-Transfer Notices*. Grantee agree that to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

C. *Refusal to Transfer*. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any acquirer or other transferee to whom such Shares shall have been so transferred.

D. *Lock-Up Period*. Grantee hereby agree that Grantee shall not sell, offer, pledge, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, grant any right or warrant to purchase, lend or otherwise transfer or encumber, directly or indirectly, any Shares or other securities of the Company, nor shall Grantee enter into any swap,

hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Shares or other securities of the Company, during the period from the filing of the first registration statement of the Company filed under the Securities Act of 1933, as amended (the "**Securities Act**"), that includes securities to be sold on behalf of the Company to the public in an underwritten public offering under the Securities Act through the end of the 180-day period following the effective date of such registration statement (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. Grantee further agree, if so requested by the Company or any representative of its underwriters, to enter into such underwriter's standard form of "lockup" or "market standoff" agreement in a form satisfactory to the Company and such underwriter. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of any such restriction period.

4. *Company's Right of First Refusal*. Before any Shares acquired by the Grantee pursuant to this Agreement (or any beneficial interest in such Shares) may be sold, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Grantee or any subsequent transferee (each a "**Holder**"), such Holder must first offer such Shares or beneficial interest to the Company and/or its assignee(s) as follows:

A. *Notice of Proposed Transfer*. The Holder shall deliver to the Company a written notice stating: (i) the Holder's bona fide intention to sell or otherwise transfer the Shares; (ii) the name of each proposed transferee; (iii) the number of Shares to be transferred to each proposed transferee; (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares; and (v) that by delivering the notice, the Holder offers all such Shares to the Company and/or its assignee(s) pursuant to this section and on the same terms described in the notice.

B. *Exercise of Right of First Refusal*. At any time within 30 days after receipt of the Holder's notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the proposed transferees, at the purchase price determined in accordance with Section 4.C.

C. *Purchase Price*. The purchase price for the Shares purchased by the Company and/or its assignee(s) under this section shall be the price listed in the Holder's notice. If the price listed in the Holder's notice includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in its sole discretion.

D. *Payment*. Payment of the purchase price shall be made, at the option of the Company and/or its assignee(s), in cash (by check), by cancellation of all or a portion of any

outstanding indebtedness of the Holder to the Company and/or its assignee(s), or by any combination thereof within 30 days after receipt by the Company of the Holder's notice (or at such later date as is called for by such notice).

E. *Holder's Right to Transfer*. If all of the Shares proposed in the notice to be transferred to a given proposed transferee are not purchased by the Company and/or its assignee(s) as provided in this section, then the Holder may sell or otherwise transfer such Shares to that proposed transferee; *provided that*: (i) the transfer is made only on the terms provided for in the notice, with the exception of the purchase price, which may be either the price listed in the notice or any higher price; (ii) such transfer is consummated within 60 days after the date the notice is delivered to the Company; (iii) the transfer is effected in accordance with any applicable securities laws, and if requested by the Company, the Holder shall have delivered an opinion of counsel acceptable to the Company to that effect; and (iv) the proposed transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section. If any Shares described in a notice are not transferred to the proposed transferee within the period provided above, then before any such Shares may be transferred, a new notice shall be given to the Company, and the Company and/or its assignees shall again be offered the right of first refusal described in this section.

F. *Exception for Certain Family Transfers*. Notwithstanding anything to the contrary contained elsewhere in this section, the transfer of any or all of the Shares during the Holder's lifetime or on the Holder's death by will or intestacy to (i) the Holder's spouse; (ii) the Holder's lineal descendants or antecedents, siblings, aunts, uncles, cousins, nieces and nephews (including adoptive relationships and step relationships), and their spouses; (iii) the lineal descendants or antecedents, siblings, cousins, aunts, uncles, nieces and nephews of Holder's spouse (including adoptive relationships and step relationships), and their spouses; and (iv) a trust or other similar estate planning vehicle for the benefit of the Holder or any such person, shall be exempt from the provisions of this section; *provided* that, in each such case, the transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section; and *provided further*, that without the prior written consent of the Company, which may be withheld in the sole discretion of the Company, no more than three transfers may be made pursuant to this section, including all transfers by the Holder and all transfers by any transferee.

G. *Termination of Right of First Refusal*. The right of first refusal contained in this section shall terminate as to all Shares acquired hereunder upon the earlier of: (i) the closing date of the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act, and (ii) the closing date of a Change of Control pursuant to which the holders of the outstanding voting securities of the Company receive securities of a class registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended. For purposes of this Agreement, a "**Change of Control**" means either: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation or stock transfer, but excluding any such transaction effected primarily for the purpose of changing the domicile of the Company),

unless the Company's stockholders of record immediately prior to such transaction or series of related transactions hold, immediately after such transaction or series of related transactions, at least 50% of the voting power of the surviving or acquiring entity (*provided* that the sale by the Company of its securities for the purposes of raising additional funds shall not constitute a Change of Control hereunder); or (ii) a sale of all or substantially all of the assets of the Company.

5. General Provisions.

A. *Choice of Law*. This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of the State of California.

B. *Integration*. This Agreement, including all exhibits hereto, represents the entire agreement between the parties with respect to the acquisition of the Shares by the Grantee and supersedes and replaces any and all prior written or oral agreements regarding the subject matter of this Agreement including, but not limited to, any representations made during any interviews, relocation discussions or negotiations whether written or oral.

C. *Notices*. Any notice, demand, offer, request or other communication required or permitted to be given by either the Company or the Grantee pursuant to the terms of this Agreement shall be in writing and shall be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one business day after being delivered by facsimile (with receipt of appropriate confirmation), (iv) one business day after being deposited with an overnight courier service or (v) four days after being deposited in the U.S. mail, First Class with postage prepaid and return receipt requested, and addressed to the parties at the addresses provided to the Company (which the Company agrees to disclose to the other parties upon request) or such other address as a party may request by notifying the other in writing.

D. *Successors*. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this section or which becomes bound by the terms of this Agreement by operation of law. Subject to the restrictions on transfer set forth in this Agreement, this Agreement shall be binding upon Grantee and their heirs, executors, administrators, successors and assigns.

E. *Assignment; Transfers.* Except as set forth in this Agreement, this Agreement, and any and all rights, duties and obligations hereunder, shall not be assigned, transferred, delegated or sublicensed by the Grantee without the prior written consent of the Company. Any attempt by the Grantee without such consent to assign, transfer, delegate or sublicense any rights, duties or obligations that arise under this Agreement shall be void. Except as set forth in this Agreement, any transfers in violation of any restriction upon transfer contained in any section of this Agreement shall be void, unless such restriction is waived in accordance with the terms of this Agreement.

F. *Waiver*. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, nor prevent that party from thereafter enforcing any other provision of this Agreement. The rights granted both parties hereunder are cumulative and shall not constitute a waiver of either party's right to assert any other legal remedy available to it.

G. *Grantee Investment Representations and Further Documents*. The Grantee agree upon request to execute any further documents or instruments necessary or reasonably desirable in the view of the Company to carry out the purposes or intent of this Agreement, including (but not limited to) the applicable exhibits and attachments to this Agreement.

H. *Severability*. Should any provision of this Agreement be found to be illegal or unenforceable, the other provisions shall nevertheless remain effective and shall remain enforceable to the greatest extent permitted by law.

I. *Rights as Stockholder*. Subject to the terms and conditions of this Agreement, Grantee shall have all of the rights of a stockholder of the Company with respect to the Shares from and after the date that Grantee deliver a fully executed copy of this Agreement (including the applicable exhibits and attachments to this Agreement) and full payment for the Shares to the Company, and until such time as Grantee dispose of the Shares in accordance with this Agreement. Upon such transfer, Grantee shall have no further rights as a holder of the Shares so purchased except (in the case of a transfer to the Company) the right to receive payment for the Shares so purchased in accordance with the provisions of this Agreement, and Grantee shall forthwith cause the certificate(s) evidencing the Shares so purchased to be surrendered to the Company for transfer or cancellation.

J. *Adjustment for Stock Split.* All references to the number of Shares and the purchase price of the Shares in this Agreement shall be adjusted to reflect any stock split, stock dividend or other change in the Shares which may be made after the date of this Agreement.

K. *Reliance on Counsel and Advisors.* Grantee acknowledge that Wilson Sonsini Goodrich & Rosati, Professional Corporation, is representing only the Company in this transaction. Grantee acknowledges that he or she has had the opportunity to review this Agreement, including all attachments hereto, and the transactions contemplated by this Agreement with his or her own legal counsel, tax advisors and other advisors. Grantee are relying solely on his or her own counsel and advisors and not on any statements or representations of the Company or its agents for legal or other advice with respect to this investment or the transactions contemplated by this Agreement.

L. *Counterparts.* This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Facsimile copies of signed signature pages shall be binding originals.

(*Signature page follows*)

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement.

COMPANY:

UNITY BIOTECHNOLOGY, INC.

By:
Name: Dr. Nathaniel E. David
Title:President and Chief Executive Officer

[*Signature Page to Restricted Stock Grant Agreement*]

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement. The Grantee agrees to notify the Company of any change in its address below.

GRANTEE:

ASCENTAGE PHARMA GROUP CORP. LTD.

Title:

Name:
Title:

Address:

11/F, AXA Centre
Gloucester Road,
Wanchai Hong Kong

[*Signature Page to Restricted Stock Grant Agreement*]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

EXHIBIT A
INVESTMENT REPRESENTATION STATEMENT

GRANTEE	:	ASCENTAGE PHARMA GROUP CORP. LTD.
COMPANY	:	UNITY BIOTECHNOLOGY, INC.
SECURITY	:	COMMON STOCK
AMOUNT	:	[●] SHARES
DATE	:	[●]

In connection with the acquisition of the above-listed shares, I, each of the undersigned, represent to the Company as follows:

1. ***The Company may rely on these representations*.** I understand that the Company's sale of the shares to me has not been registered under the Securities Act of 1933, as amended (the "**Securities Act**"), because the Company believes, relying in part on my representations in this document, that an exemption from such registration requirement is available for such sale. I understand that the availability of this exemption depends upon the representations I am making to the Company in this document being true and correct.

2. ***I am purchasing for investment.*** I am purchasing the shares solely for investment purposes, and not for further distribution. My entire legal and beneficial ownership interest in the shares is being acquired and shall be held solely for my account, except to the extent I intend to hold the shares jointly with my spouse. I am not a party to, and do not presently intend to enter into, any contract or other arrangement with any other person or entity involving the resale, transfer, grant of participation with respect to or other distribution of any of the shares. My investment intent is not limited to my present intention to hold the shares for the minimum capital gains period specified under any applicable tax law, for a deferred sale, for a specified increase or decrease in the market price of the shares, or for any other fixed period in the future.

3. ***I can protect my own interests*.** I can properly evaluate the merits and risks of an investment in the shares and can protect my own interests in this regard, whether by reason of my own business and financial expertise, the business and financial expertise of certain professional advisors unaffiliated with the Company with whom I have consulted, or my preexisting business or personal relationship with the Company or any of its officers, directors or controlling persons.

4. ***I am informed about the Company*.** I am sufficiently aware of the Company's business affairs and financial condition to reach an informed and knowledgeable decision to acquire the shares. I have had opportunity to discuss the plans, operations and financial condition

of the Company with its officers, directors or controlling persons, and have received all information I deem appropriate for assessing the risk of an investment in the shares.

5. ***I recognize my economic risk.*** I realize that the acquisition of the shares involves a high degree of risk, and that the Company's future prospects are uncertain. I am able to hold the shares indefinitely if required, and am able to bear the loss of my entire investment in the shares.

6. ***I know that the shares are restricted securities.*** I understand that the shares are "restricted securities" in that the Company's sale of the shares to me has not been registered under the Securities Act in reliance upon an exemption for non-public offerings. In this regard, I also understand and agree that:

A. I must hold the shares indefinitely, unless any subsequent proposed resale by me is registered under the Securities Act, or unless an exemption from registration is otherwise available (such as Rule 144);

B. the Company is under no obligation to register any subsequent proposed resale of the shares by me; *and*

C. the certificate evidencing the shares will be imprinted with a legend which prohibits the transfer of the shares unless such transfer is registered or such registration is not required in the opinion of counsel for the Company.

7. ***I am familiar with Rule 144.*** I am familiar with Rule 144 adopted under the Securities Act, which in some circumstances permits limited public resales of "restricted securities" like the shares acquired from an issuer in a non-public offering. I understand that my ability to sell the shares under Rule 144 in the future is uncertain, and may depend upon, among other things: (i) the availability of certain current public information about the Company; (ii) the resale occurring more than a specified period after my acquisition and full payment (within the meaning of Rule 144) for the shares; and (iii) if I am an affiliate of the Company (A) the sale being made in an unsolicited "broker's transaction", transactions directly with a market maker or riskless principal transactions, as those terms are defined under the Securities Exchange Act of 1934, as amended, (B) the amount of shares being sold during any three-month period not exceeding the specified limitations stated in Rule 144, *and* (C) timely filing of a notice of proposed sale on Form 144, if applicable.

8. ***I know that Rule 144 may never be available.*** I understand that the requirements of Rule 144 may never be met, and that the shares may never be saleable under the rule. I further understand that at the time I wish to sell the shares, there may be no public market for the Company's stock upon which to make such a sale, or the current public information requirements of Rule 144 may not be satisfied, either of which may preclude me from selling the shares under Rule 144 even if the relevant holding period had been satisfied.

9. ***I know that I am subject to further restrictions on resale.*** I understand that in the event Rule 144 is not available to me, any future proposed sale of any of the shares by me will not be possible without prior registration under the Securities Act, compliance with some other registration exemption (which may or may not be available), or *each* of the following: (i) my written notice to the Company containing detailed information regarding the proposed sale, (ii)

my providing an opinion of my counsel to the effect that such sale will not require registration, and (iii) the Company notifying me in writing that its counsel concurs in such opinion. I understand that neither the Company nor its counsel is obligated to provide me with any such opinion. I understand that although Rule 144 is not exclusive, the Staff of the SEC has stated that persons proposing to sell private placement securities other than in a registered offering or pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

10. ***I know that I may have tax liability due to the uncertain value of the shares.*** I understand that the Board of Directors believes its valuation of the shares represents a fair appraisal of their worth, but that it remains possible that, with the benefit of hindsight, the Internal Revenue Service may successfully assert that the value of the shares on the date of my acquisition is substantially greater than the Board's appraisal. I understand that any additional value ascribed to the shares by such an IRS determination will constitute ordinary income to me as of the acquisition date, and that any additional taxes and interest due as a result will be my sole responsibility payable only by me, and that the Company need not and will not reimburse me for that tax liability.

11. ***Non-U.S. Investor***. If I am not a United States person, I hereby represents that I am satisfied as to the full observance of the laws of my jurisdiction in connection with any invitation to receive the shares issuable pursuant to this Agreement, or any use of this Agreement, including (i) the legal requirements within my jurisdiction for the acquisition of the shares pursuant to this Agreement, (ii) any foreign exchange restrictions applicable to such receipt or transfer, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the acquisition, holding, redemption, sale or transfer of such securities. My subscription for, and my continued beneficial ownership of the shares will not violate any applicable securities or other laws of my jurisdiction.

12. ***Principal Place of Business*.** The address of my principal place of business is set forth on the signature page below.

By signing below, the undersigned acknowledge their agreement with each of the statements contained in this Investment Representation Statement as of the date first set forth above, and their intent for the Company to rely on such statements in issuing the shares to me.

ASCENTAGE PHARMA GROUP CORP. LTD.

Address of Grantee' Principal Place of Business:

11/F AXA Centre
Gloucester Road,
Wanchai Hong Kong

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Part B: Capitalization Table

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit 10.15

APG1252 License Agreement

This APG1252 License Agreement (the "Agreement") effective as of the 2nd day of Feburary, 2016, (the "Signing Date") is made by and between **Ascentage Pharma Group Corp. Ltd.**, a Hong Kong corporation ("Ascentage"), with a business address at 11/F, AXA CENTRE, Gloucester Road, Wanchai, Hong Kong, and **Unity Biotechnology, Inc.**, a Delaware corporation ("Unity"), with a business address at 1700 Owens Street, Suite 535, San Francisco, California 95158. Each of Ascentage and Unity shall be a "Party," and both the "Parties."

BACKGROUND

A. Unity and Ascentage entered into that certain Compound Library and Option Agreement of even date herewith (the "Library Agreement"), pursuant to which Ascentage has granted to Unity the right to screen Ascentage's existing collection of BCL-2/BCL-xL inhibitor compounds as well as any additional BCL-2/BCL-xL inhibitor compounds discovered by Ascentage during the term of the Library Agreement, in each case to identify compounds with potential utility in the treatment of age-related conditions other than Oncology Indications; and

B. Ascentage has begun developing a BCL-2/BCL-xL inhibitor known as APG-1252 (as further defined below) and owns or controls certain patents, know-how and other intellectual property relating to APG-1252.

C. Unity desires to acquire from Ascentage a license under the Licensed Intellectual Property to develop APG-1252 in the Field and Territory (each as defined below), and Ascentage is willing to grant Unity such license on the terms and conditions herein, all as set forth below.

NOW, THEREFORE, for and in consideration of the covenants, conditions, and undertakings hereinafter set forth, it is agreed by and between the Parties as follows:

ARTICLE 1
DEFINITIONS

1.1 The following terms have the meanings set forth in the Library Agreement:

Affiliate
Ascentage Intellectual Property
Collaboration Period
Compounds
Compound License Agreement(s)
Greater China
IND
Oncology Indications
Patents
Technology
Third Party
Unity Bcl-2 [***] Product

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

1.2 "APG-1252" means the chemical compound with the structure identified in Schedule 1.2, [***].

1.3 "APG-1252 Work-a-Like Product" means a Licensed Product under a Compound License Agreement, which product is [***] and is subject to the milestones and royalties described as [***] in Sections 5.2 (Development/Sales Milestones) and 5.3 (Royalties) of the Form of Compound License Agreement attached as Exhibit 3.3.2(a) of the Library Agreement.

1.4 "Fair Market Value" means with respect to a share of Unity common stock, the average price that Unity common stock is publicly trading at for [***] ([***]) days prior to the date in question, or, if the security is not publicly traded, the value of such stock as determined in good faith by Unity's board of directors in reliance upon Unity's most recent IRC Section 409A independent valuation of Unity's common stock that it used for the purposes of granting stock options to its employees.

1.5 "Control" and its correlative terms, "Controlled" or "Controls" shall mean, with respect to any Patent or item of Technology, that a Party or one of its Affiliates owns or possesses rights to such Patent or item of Technology sufficient to grant the access, license or sublicense contemplated in this Agreement without violating the terms of any agreement or other arrangement with any Third Party.

1.6 "Cover" and its correlative terms, "Covers", "Covered" or "Covering" means (a) with respect to an issued patent, that, in the absence of a license, the use, offer for sale, sale, importation or manufacture of the product in question would infringe one or more claims of such patent or (b) with respect to a pending patent application, that, in the absence of a license, the use, offer for sale, sale, importation or manufacture of the product in question would infringe one or more claims of such patent application, should such claims issue as published.

1.7 "Effective Date" shall mean the date on which the Second Amendment takes effect.

1.8 "Enabling IP" means Patents and/or Technology of a Third Party that Covers or relates to a Royalty-bearing Product and is necessary or useful for the research, development, manufacture, use, sale or import of Royalty-bearing Products, including Patents directed to the composition and manufacture of Licensed Compound, but excluding Patents related to formulation and therapeutic methods.

1.9 "EMA" means the European Medicines Agency and any successor agency.

1.10 "Existing Agreements" means (a) that certain Exclusive License Agreement between Unity and the Mayo Foundation for Medical Education and Research originally entered into by the parties effective June 28th, 2013; (b) that certain Exclusive License Agreement between Unity and the Buck Institute for Research on Aging originally entered into by the parties effective February 3rd, 2014; and (c) that certain Exclusive License Agreement between Unity and the Board of Trustees of the University of Arkansas originally entered into by the parties effective April 28th, 2015.

1.11 "FDA" means the United States Food and Drug Administration and any successor agency.

1.12 "Field" means the prophylaxis and treatment of, and palliation of symptoms associated with, indications other than Oncology Indications.

1.13 "Generic Product" means a product which (a) contains as its active pharmaceutical ingredient a compound that is (or is substantially the same as) the Licensed Compound or the active pharmaceutical contained in a Unity Bcl-2 [***] Product, and (b) has been placed on the market pursuant to a validly granted marketing authorization.

1.14 "Licensed Compound" means APG-1252.

1.15 "Licensed Intellectual Property" means the Licensed Patents and Licensed Technology.

1.16 "Licensed Patents" means Patents owned or Controlled by Ascentage or its Affiliates during the Term, in each case to the extent Covering the Licensed Compound, a Licensed Product or a Unity Bcl-2 [***] Product.

1.17 "Licensed Product" means a pharmaceutical product containing the Licensed Compound (either alone or with other active pharmaceutical ingredients), in all forms, presentations, formulation and dosage forms.

1.18 "Licensed Technology" means Technology owned or Controlled by Ascentage or its Affiliates during the Term, in each case to the extent such Technology is necessary or reasonably useful for the development, manufacture or commercialization of the Licensed Compound, a Licensed Product or a Unity Bcl-2 [***] Product.

1.19 "Marketing Approval Application" or "MAA" means a New Drug Application (or its equivalent), as defined in the U.S. Food, Drug and Cosmetic Act and the regulations promulgated thereunder, or any corresponding or similar application, registration or certification in any country.

1.20 "Net Sales" means the gross amount invoiced to non-Affiliate Third Parties on sales of Royalty-bearing Products by Unity or its Affiliates or Third Party Sublicensees, less the actual amounts incurred, allowed, or paid for the following items (if not previously deducted from the amount invoiced and provided that such deductions are calculated in accordance with generally accepted accounting principles of the United States of America ("GAAP") on a consistent basis): (a) trade, cash, and quantity discounts; (b) amounts for claims, allowances or credits for returns, rejections or recalls; (c) freight, shipping and insurance charges allocable to such Royalty-bearing Products; (d) sales taxes, duties and other governmental charges (including value added tax) on particular sales, but excluding what is commonly known as income taxes; (e) government mandated rebates; (f) contracted rebates; and (g) a provision for uncollectible accounts; in each case as determined from books and records of the selling party maintained in accordance with GAAP, as consistently applied by such selling party. In the event that Unity grants a sublicense to a Third Party Sublicensee hereunder, and receives payments based upon such Third Party Sublicensee's sales of Royalty-bearing Product, Unity may, with Ascentage's consent, which consent shall not be unreasonably withheld or delayed, substitute the definition of "Net Sales," used by such Third Party Sublicensee to calculate its payments to Unity in place of the foregoing definition of "Net Sales" for purposes of calculating royalties payable to Ascentage on such Third

Party Sublicensee's sales.

1.21 "Phase I Clinical Trial" means a human clinical trial, the principal purpose of which is preliminary determination of safety of a drug in healthy individuals or patients, that would satisfy the requirements of 21 C.F.R. §312.21(a).

1.22 "Phase II Clinical Trial" means a clinical trial of a drug conducted on a limited number of patients for the purpose of preliminary evaluation of clinical efficacy and safety of such drug, and/or to obtain an indication of the dosage regimen required, in each case that would satisfy the requirements of 21 C.F.R. 312.21(b).

1.23 "Phase III Clinical Trial" means a pivotal human clinical trial intended to gather additional information regarding the safety and efficacy of the drug in patients with the disease being studied, which clinical study is designed to be of a size and statistical power sufficient to support the filing of an MAA and that would satisfy the requirements of 21 C.F.R. 312.21(c).

1.24 "Royalty-bearing Product" means a Licensed Product or a Unity Bcl-2 [***] Product.

1.25 "Royalty-bearing Product-Specific Patents" means those Licensed Patents that [***] the Licensed Compound, a Licensed Product or a Unity Bcl-2 [***] Product and [***].

1.26 "Territory" means the entire world excluding Greater China.

1.27 "Third Party Sublicensee" means any Third Party to which Unity licenses the right to commercialize any Royalty-bearing Product. For the avoidance of doubt, "Third Party Sublicensee" shall not include Third Party distributors, service providers, vendors and suppliers that do not have the right to market or promote the Royalty-bearing Product.

1.28 "UM License Agreement" means that certain license agreement entered into by Ascentage and the Regents of the University of Michigan ("UM") effective as of December 1, 2010, as amended by all amendments to such license agreement existing as of the Effective Date.

1.29 "Unity Bcl-2 [***] Product" means any [***] product for [***], wherein the [***], and in each case that (a) is developed by Unity during the Collaboration Period, (b) is not an APG-1252 Work-a-Like Product, and (c) for which an IND is filed prior to the later of the [***] anniversary of the Effective Date or the [***] anniversary of the expiration or termination of the Library Agreement. Notwithstanding anything to the contrary in this Agreement, any compound that was designed ([***]) or [***] synthesized [***] shall not be considered a Unity Bcl-2 [***] Product without Unity's express written consent. [***] In addition, Unity agrees that upon request it will [***].

1.30 "Valid Claim" means a claim contained in an issued Patent within the Licensed Patents in any country that (a) has not expired; (b) has not been disclaimed; (c) has not been cancelled or superseded, or if cancelled or superseded, has been reinstated; and (d) has not been revoked, held invalid, or otherwise declared unenforceable or not allowable by a tribunal or patent authority of competent jurisdiction over such claim in such country from which no further appeal has or may be taken.

ARTICLE 2
LICENSES

2.1 Licenses.

2.1.1 Development Licenses. Subject to the terms and conditions of this Agreement, Ascentage hereby grants to Unity a royalty-free, exclusive license in the Field and Territory, with the right to grant sublicenses as provided in Section 2.2, under the Licensed Intellectual Property to (a) research, develop and seek and obtain marketing approval for the Licensed Compound and Licensed Products using Licensed Compound and/or Licensed Products supplied by or on behalf of Ascentage and (b) research, make, develop and seek and obtain marketing approval for Unity Bcl-2 [***] Products; in each case solely in the Field and Territory, and to have any of the foregoing performed on its behalf by a Third Party; and

2.1.2 Commercialization Licenses. Subject to the terms and conditions of this Agreement, Ascentage hereby grants to Unity a royalty-bearing, exclusive license in the Field and Territory, with the right to grant sublicenses as provided in Section 2.2, under the Licensed Intellectual Property: (a) to use the Licensed Compound supplied by or on behalf of Ascentage to make or have made the Licensed Products; (b) to use, offer for sale, sell, import, export, market, promote and distribute Licensed Compound and Licensed Products, and (c) to make, use, offer for sale, sell, import, export, market, promote and distribute Unity Bcl-2 [***] Products; in each case, solely for use in the Field and Territory, and to have any of the foregoing performed on its behalf by a Third Party. It is understood and agreed that the licenses set forth in this Section 2.1.2 exclude the right to make or have made the Licensed Compound.

2.2 Sublicenses. Unity may grant and authorize sublicenses within the scope of the license granted to Unity pursuant to this Agreement, provided that for clarity, Unity shall remain responsible for all milestone and other payments due to Ascentage under this Agreement based on the activities of Unity's sublicensees.

2.3 Third Party Intellectual Property. If after the Effective Date, Ascentage acquires or licenses from a Third Party subject matter that would fall within the Licensed Intellectual Property ("Third Party Intellectual Property") that is subject to any payment obligation to the Third Party, then Ascentage shall so notify Unity and Unity shall inform Ascentage if it wishes such subject matter to be included within the Licensed Intellectual Property. If Unity notifies Ascentage that it does wish such subject matter to be so included, the rights granted to Unity hereunder with respect to such Third Party Intellectual Property shall be subject to Unity promptly reimbursing Ascentage for [***] and Unity shall reimburse Ascentage for [***]. Upon request by Unity, Ascentage shall disclose to Unity a written description of such payment obligations. Notwithstanding the foregoing, Unity shall have the right to treat amounts paid to Ascentage as reimbursements for payments for Enabling IP for purposes of Section 5.5.

2.4 No Implied Licenses. Nothing herein shall be construed as granting Unity, by implication, estoppel or otherwise, any license or other right (a) to any intellectual property of Ascentage other than the Licensed Intellectual Property (b) to commercialize Licensed Products outside of the Field and Territory (c) not relating to the Licensed Compound, Licensed Products and Unity Bcl-2 [***] Products or (d) any right or license other than those expressly granted herein.

2.5 [***].

2.6 Exclusivity/[***].

2.6.1 Exclusivity.

(a) No Development or Commercialization of Licensed Compound in the Field. Ascentage hereby covenants that except as expressly permitted under any future agreement that the Parties may enter into pursuant to Article 8 below pertaining to the China JVCO, Ascentage shall not: (a) research, develop, use or commercialize, and shall not authorize any Affiliate or other Third Party to research, develop, use or commercialize, the Licensed Compound (or any Licensed Product) in the Field, and (b) manufacture, or authorize any Third Party to manufacture, the Licensed Compound or any Licensed Product for use in the Field, other than for supply to Unity in accordance with the terms of the Supply Agreement to be negotiated pursuant to Article 4 below.

(b) No Development or Commercialization of Licensed Compounds. Ascentage hereby covenants that except as expressly permitted under any future agreement that the Parties may enter into pursuant to Article 8 below pertaining to the China JVCO, Ascentage shall not research, develop, manufacture, use or commercialize, and shall not authorize any Affiliate or other Third Party to research, develop, manufacture, use or commercialize, any Unity Bcl-2 [***] Products.

(c) Notwithstanding anything to the contrary, Ascentage shall be permitted to develop any products containing the Licensed Compound for Oncology Indications independently.

2.6.2 [***] Licensed Products. Within [***] of the effective date of the Library Agreement the Parties will [***] to [***]. The [***] is [***]. In addition, the [***] to [***]. Ascentage will appoint [***] and Unity will appoint [***] to [***].

2.7 [***]. The Parties agree that within [***] of the Effective Date of this Agreement they will put in place a procedure pursuant to which [***] shall [***] that [***] to [***].

ARTICLE 3
DUE DILIGENCE

3.1 General. Unity shall use commercially reasonable efforts to develop and obtain marketing approval for at least one Royalty Product or APG-1252 Work-a-Like Product (collectively, "[***] Product"), and thereafter shall use commercially reasonable efforts to launch and commercialize each such [***] Product and to fulfil the market demand therefor.

3.2 Diligence Milestones. Without limiting the it's general diligence obligations under Section 3.1 above, Unity agrees that it shall achieve the following diligence milestones with respect to a [***] Product by the deadlines specified below:

Milestone	Time Period
1. [***]	Within [***] ([***]) [***] of the Effective Date

2. [***]	Within [***] ([***]) [***] of the Effective Date
3. [***]	Within [***] ([***]) [***] of the Effective Date
4. [***]	Within [***] ([***]) [***] of the Effective Date

If Unity is unable to meet [***], as applicable, by the specified deadline, Unity shall none-the-less be deemed to be in compliance with its diligence obligations hereunder so long as it [***].

ARTICLE 4
MANUFACTURE AND SUPPLY

4.1 Within [***] of the effective date of the Library Agreement, the Parties will negotiate and agree upon the terms and conditions pursuant to which Ascentage (itself or through one or more Third Party contract manufacturers) shall manufacture and supply Unity, its Affiliates and their Third Party Sublicensees with (a) Licensed Product for clinical use, and (b) Licensed Compound for commercial use (the "Supply Agreement"). Ascentage will appoint [***] and Unity will appoint [***] to negotiate such Supply Agreement on their respective behalf. For clarity it is acknowledged that [***].

ARTICLE 5
PAYMENTS

5.1 Equity Grants.

5.1.1 Upfront Fee. As partial consideration for the rights and licenses granted to Unity under this Agreement, Unity shall issue to Ascentage, subject to Ascentage's execution and delivery to Unity of a Stock Issuance Agreement in substantially the form attached hereto as Schedule 5.1 (such form of agreement, the "Stock Agreement"), One Million Five Hundred Seventy Three Thousand Three Hundred Forty (1,573,340) shares of Unity common stock; such shares to be issued to Ascentage within [***] ([***]) days of the Effective Date.

5.1.2 [***]. Upon the [***], Unity shall issue to Ascentage Three Hundred Ninety Three Thousand Three Hundred Thirty Five (393,335) shares of Unity common stock; such shares to be issued to Ascentage pursuant to the Stock Agreement within [***] ([***]) days of date that [***] occurs. For clarity, [***].

5.1.3 [***]. Upon the [***], Unity shall issue to Ascentage the following number of shares of Unity common stock based on how long after the Effective Date such [***]; such shares to be issued to Ascentage pursuant to the Stock Agreement within [***] ([***]) days of date that such [***] occurs:

(a) [***] ([***]) shares of Unity common stock if such [***] occurs within [***] ([***]) [***] of the Effective Date.

(b) [***] ([***]) shares of Unity common stock if such [***] occurs more than [***] ([***]) [***] after the Effective Date but less than [***] ([***]) [***] after the Effective Date.

(c) [***] ([***]) shares of Unity common stock if such [***] occurs more than [***] ([***]) [***] after the Effective Date.

5.1.4 Equity Cap. Notwithstanding anything in the contrary in this Agreement, the Library Agreement or any Compound License Agreement(s), the maximum cumulative aggregate number of shares of Unity common stock that Ascentage is eligible to receive under Sections 6.1 and 6.2 of the Library Agreement, Section 5.1 of any Compound License Agreement(s) and this Section 5.1 is:

(a) [***] ([***]) shares of Unity common stock if only one Licensed Product is developed; and

(b) Three Million Nine Hundred Thirty Three Thousand Three Hundred and Fifty (3,933,350) shares of Unity common stock if two or more Licensed Products is developed.

5.2 Development/Sales Milestones. In partial consideration of the rights and licenses granted herein to Unity, Unity shall pay Ascentage the following milestone payments:

5.2.1 Licensed Products. Within [***] ([***]) days after the first achievement by Unity (or any of its Affiliates or Third Party Sublicensees) of each of the following milestones with respect to a Licensed Product, Unity shall pay Ascentage the corresponding milestone payment set forth below, in accordance with the payment provisions of Article 6 below:

Milestone Event	Milestone Payment
1. [***]:	$[***]
2. [***]:	$[***]
3. [***]:	$[***]
4. [***]	$[***]
5. [***]	$[***]
Total per Licensed Product	**$**[***]

5.2.2 Unity Bcl-2 [***] Products. Within [***] ([***]) days after the first achievement by Unity (or any of its Affiliates or Third Party Sublicensees) of each of the following milestones with respect to a Unity Bcl-2 [***] Product, Unity shall pay Ascentage the corresponding milestone payment set forth below, in accordance with the payment provisions of Article 6 below:

Milestone Event	Milestone Payment
1. [***]:	$[***]
2. [***]:	$[***]
3. [***]:	$[***]
4. [***]	$[***]
5. [***]	$[***]
Total per Unity Bcl-2 [***] Product	**$**[***]

5.2.3 Certain Additional Terms.

(a) For clarity, all forms, presentations, formulation and dosage forms of a Licensed Product or Unity Bcl-2 [***] Product shall be considered one and the same Licensed Product or Unity Bcl-2 [***] Product (as applicable) for purposes of this Section 5.2.

(b) If Unity begins development of one Licensed Product or Unity Bcl-2 [***] Product and a milestone payment is made under this Section 5.2, and then Unity terminates development of such product and begins development of a second Licensed Product or Unity Bcl-2 [***] Product, the milestone which was already paid under this Section 5.2 for the abandoned product will not be repeated, but the remaining milestone payments hereunder will be due as the second Licensed Product or Unity Bcl-2 [***] Product (as applicable) advances;

(c) In its sole discretion, Unity may elect in lieu of the payment of the milestone payments owing to Ascentage under this Section 5.2, to grant to Ascentage that number of shares of Unity common stock of equivalent value (based on the Fair Market Value of such Unity common stock at the time of such grant).

5.3 Royalties. In partial consideration of the licenses granted herein to Unity, Unity shall pay to Ascentage a running royalty equal to the percentage set forth below on the Net Sales of each Royalty-bearing Product based on whether such Royalty-bearing Product is a Licensed Product or Unity Bcl-2 [***] Product, subject to any adjustments set forth in Sections 5.5 and 5.6, and in accordance with the payment provisions of Article 6 below.

5.3.1 Licensed Products.

Annual Net Sales of Licensed Product	Applicable Royalty Rate
Portion of worldwide annual Net Sales of the Licensed Product less than or equal to [***] Dollars (US$[***])	[***]%
Portion of worldwide annual Net Sales of the Licensed Product over [***] Dollars (US$[***])	[***]%

5.3.2 Unity Bcl-2 [***] Products.

Annual Net Sales of Licensed Product	Applicable Royalty Rate
Portion of worldwide annual Net Sales of the Licensed Product less than or equal to [***] Dollars (US$[***])	[***]%
Portion of worldwide annual Net Sales of the Licensed Product over [***] Dollars (US$[***])	[***]%

5.4 Royalty Term. Unity's obligation to pay royalties on Net Sales of Royalty-bearing Products under this Agreement shall continue on a country-by-country and Royalty-bearing Product-by-Royalty-bearing Product basis until the later of (a) abandonment or expiration of the last Valid Claim that claims the [***] of the Licensed Compound (or the [***] contained in the Unity Bcl-2 [***] Product) in such country, (b) the date of expiry of any applicable regulatory, pediatric, orphan drug or data exclusivity obtained for such Royalty-bearing Product in such country, or (c) ten (10) years after the first commercial sale of the Royalty-bearing Product by or under the authority of Unity in any country in the Territory.

5.5 Royalty Stacking. Unity shall be entitled to deduct from the amounts owing to Ascentage under Sections 5.2 and 5.3 above [***] percent ([***]%) of any royalties or other payments made to Third Parties for Enabling IP, provided that (a) the total aggregate amount payable to Ascentage under Sections 5.2 and 5.3 in any [***] may not be reduced to less than [***] percent ([***]%) of the amounts that would otherwise be due Ascentage in such [***], and (b) Unity shall not be entitled to deduct any royalties or other payments made under the Existing Agreements. If, in any [***], Unity is not able to fully recover its [***] percent ([***]%) portion of the payments due to a Third Party, it shall be entitled to carry forward such right of off-set to future [***] with respect to the excess amount

5.6 Generic Products. If at any time during the term of this Agreement a Generic Product enters the market in any country and has for a period of at least [***] ([***]) consecutive [***] a market share in such country of at least [***] percent ([***]%) of the then combined unit volume of the corresponding Royalty-bearing Product (i.e., the Royalty-bearing Product containing the same active pharmaceutical ingredient(s) as are present in the Generic Product) and such Generic Product, then Unity's obligation to pay royalties to Ascentage on Net Sales of such Royalty-bearing Product in such country shall be to reduced to [***] percent ([***]%) of the amounts that would otherwise be due Ascentage under Section 5.3 in such calendar quarter.

5.7 Maximum Reduction to Royalties. Notwithstanding anything to the contrary in this Article 5, in no event shall the royalties owing to Ascentage with respect to Net Sales of a Royalty-bearing Product in any country be reduced by cumulative operation of Sections 5.5 and 5.6 to less than [***] percent ([***]%) of the amounts that would otherwise be due Ascentage under Section 5.3 in such calendar quarter.

5.8 Combination Products. In the event that a Royalty-bearing Product is sold for a single price in combination with another therapeutically active pharmaceutical ingredient, or other product or service, for which no royalty would be due hereunder if sold separately, Net Sales from such combination sales, for purposes of calculating the applicable royalty rate and the applicable royalty due under Section 5.3 shall be calculated by multiplying the Net Sales of the combination product by the fraction A/(A + B), where A is the average gross selling price during the previous [***] of the Royalty-bearing Product sold separately and B is the gross selling price during the previous [***] of the therapeutically active ingredient, product or service. In the event that separate sales of the Royalty-bearing Product or the additional therapeutically active ingredient, product or service were not made during the previous [***], then the Net Sales shall be reasonably allocated between such Royalty-bearing Product and such other active ingredient, product or service as agreed upon by the Parties, or failing agreement, determined in accordance with Section 13.1 (Dispute Resolution) below.

5.9 Unity's Covenant. Unity hereby agrees that any shares of common stock issued to Ascentage will not be diluted unless diluted in good faith by Unity on a proportionate basis to the other shares of common stock of Unity outstanding at the time of any such dilution, and subject to the anti-dilution protections as set forth in Unity's certificate of incorporation, as may be amended from time to time in good faith; provided further, that Unity shall not take actions that specifically treat Ascentage differently from other holders of common stock, or issue any capital stock in a manner which is intended to circumvent this covenant. The shares of common stock issued to Ascentage shall be duly adjusted for any bonus issue, share split, consolidation, subdivision, reclassification, recapitalization or similar arrangement of Unity, in each case in accordance with,

and as expressly contemplated by, Unity's certificate of incorporation, as may be amended from time to time in good faith.

ARTICLE 6
ACCOUNTING; RECORDS; METHOD OF PAYMENT

6.1 Royalty Reports; Payments, Invoices. After the first sale of a Royalty-bearing Product on which royalties are payable by Unity hereunder, Unity shall make quarterly written reports to Ascentage within [***] ([***]) days after the end of each calendar quarter, stating in each such report the number, description, and aggregate Net Sales of Royalty-bearing Product sold during the calendar quarter upon which a royalty is payable under Article 5 above. Concurrently with the making of such reports, Unity shall pay to Ascentage all amounts payable pursuant to Article 5 above, in accordance with the payment provisions of Section 6.3.

6.2 Records; Inspection. During the term of this Agreement and for a period of [***] ([***]) years thereafter, Unity and its Affiliates shall keep complete, true and accurate books of account and records for the purpose of determining the amounts payable to Ascentage under this Agreement. Ascentage shall have the right to cause an independent, certified public accountant reasonably acceptable to Unity to audit such records to confirm gross sales, Net Sales and royalty payments for a period covering not more than the preceding [***] ([***]) years. Unity agrees to either: (a) require each of its Third Party Sublicensees to maintain similar books and records and to open such records for inspection by an independent, certified public accountant reasonably satisfactory to such Third Party Sublicensee, on behalf of, and as required by, Ascentage for the purpose of verifying payments hereunder, or (b) obtain such audits rights from the Third Party Sublicensee for itself and exercise such audit rights on behalf of Ascentage upon Ascentage's request and disclose the results thereof to Ascentage. All such inspections may be made no more than once each calendar year at reasonable times and on reasonable notice. No accounting period of Unity or its Affiliate or Third Party Sublicensee shall be subject to audit more than one time hereunder. Such independent, certified public accountant will be obliged to execute a reasonable confidentiality agreement prior to commencing any such inspection. The results of any inspection hereunder shall be provided to both Parties, and Unity shall pay any underpayment to Ascentage within [***] ([***]) days. Inspections conducted under this Section 6.2 shall be at the expense of Ascentage (and Ascentage will reimburse Unity's reasonable out-of-pocket costs of those inspections conducted by Unity at Ascentage's request under (b) above), unless a variation or error producing an increase exceeding [***] percent ([***]%) of the amount stated for any period is established in the course of any such inspection, whereupon all costs of such audit of such period will be paid by Unity.

6.3 Payment Method. All payments due hereunder shall be made in U.S. dollars, and shall be made by bank wire transfer in immediately available funds to an account designated by Ascentage in a written notice to Unity. If any currency conversion shall be required in connection with the payment of royalties hereunder, such conversion shall be made by using the exchange rates used by Unity in calculating Unity's own revenues for financial reporting purposes.

6.4 Late Payments. Any payments due from Unity that are not paid on the date such payments are due under this Agreement shall bear interest at [***] ([***]%) above the then prevailing US Federal Funds Target Rate (Bloomberg page: FDTR <Index>) per annum calculated

on a daily basis and payable for the period from the date payment is due until the date payment is actually made. This Section 6.4 shall in no way limit any other remedies available to any Party.

ARTICLE 7
PATENT PROSECUTION AND ENFORCEMENT

7.1 Prosecution of Patents within the Licensed Intellectual Property.

7.1.1 General.

(a) Except as set forth in Section 7.1.1(b) or Section 7.1.1(c) hereof, Ascentage shall have the sole right to control the preparation, filing, prosecution and maintenance of all Licensed Patents using patent counsel of its choice.

(b) Unity shall have the first right, but not the obligation, to prepare, file, prosecute and maintain Royalty-bearing Product-Specific Patents. Unity shall (i) keep Ascentage reasonably informed as to its filing and prosecution strategy for Royalty-bearing Product-Specific Patents and the filing, prosecution and maintenance of Royalty-bearing Product-Specific Patents, (ii) provide Ascentage with a reasonable opportunity to review drafts of proposed patent office submissions with respect to Royalty-bearing Product-Specific Patents; and (iii) consider in good faith the requests and suggestions of Ascentage with respect to strategies for filing and prosecuting such Royalty-bearing Product-Specific Patents. In the event that Unity desires to abandon or decline further responsibility for any such Royalty-bearing Product-Specific Patent, Unity shall provide reasonable prior written notice to Ascentage of such intention to abandon or decline responsibility, but in no case later than [***] ([***]) days prior to any required action relating to the filing, prosecution or maintenance of such Royalty-bearing Product-Specific Patent, and Ascentage shall have the right, at its discretion, to assume such responsibility.

(c) With respect to any Licensed Patent (other than a Royalty-bearing Product-Specific Patent) that claims the Licensed Compound, a Licensed Product or Unity Bcl-2 [***] Product, Ascentage shall have the first right, but not the obligation, to prepare, file, prosecute and maintain such Licensed Patent and shall (i) keep Unity reasonably informed as to its filing and prosecution strategy for such Licensed Patent and the filing, prosecution and maintenance of such Licensed Patent, (ii) provide Unity with a reasonable opportunity to review drafts of proposed patent office submissions with respect to such Licensed Patent; and (iii) follow the directions given by Unity with respect to filing and prosecuting such Licensed Patents, unless [***], in which case [***] and [***]. In the event that Ascentage desires to abandon or decline further responsibility for any Licensed Patent, Ascentage shall provide Unity [***] notice and the opportunity to assume responsibility for such Licensed Patent.

7.1.2 For purposes of this Article 7, “prosecution and maintenance” of patents and patent applications shall be deemed to include, without limitation, the conduct of interferences or oppositions, and/or requests for re-examinations, reissues or extensions of patent terms.

7.2 Enforcement of Licensed Patents. If either Party determines that a Third Party is making, using or selling a product that may infringe any Licensed Patent, that Party shall notify the other Party in writing.

7.2.1 Infringement by a Competitive Product.

(a) With respect to any such infringing activity that involves the manufacture, use or sale by a Third Party of any product that [***] ("Competitive Product"), Unity shall have the first right, at its sole option, to bring suit to enforce any Licensed Patent, and/or to defend any declaratory judgment action with respect thereto ("Enforcement Action"); provided, however, that Unity shall keep Ascentage reasonably informed as to the defense and/or settlement of any such Enforcement Action. Ascentage shall have the right to participate in any such Enforcement Action with counsel of its own choice at its own expense. All recoveries received by Unity from an Enforcement Action shall be first applied to reimburse Unity's and then Ascentage's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringing activity that involves the manufacture, use or sale by a Third Party of any Competitive Product, be treated as Net Sales.

(b) In the event Unity elects not to initiate an Enforcement Action with respect to any commercially significant infringing activity that involves the manufacture, use or sale by a Third Party of any Competitive Product within [***] ([***]) days of a request by Ascentage to do so ([***]), Ascentage may initiate such action at its expense. Unity shall have the right to participate in any such action with counsel of its own choice at its own expense. All recoveries received by Ascentage from an Enforcement Action shall be first applied to reimburse Ascentage's and then Unity's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringement of the Licensed Patents, be split [***].

7.2.2 Other Instances of Infringement. With respect to any such infringing activity that does not involve the manufacture, use or sale by a Third Party of a Competitive Product, Ascentage shall have the sole right, at its sole option, to bring suit to enforce any Licensed Patent, and/or to defend any declaratory judgment action with respect thereto and to retain all recoveries received by Ascentage in connection therewith.

7.3 Infringement Claims Against Unity. If the production, sale or use of a Royalty-bearing Product pursuant to this Agreement results in any claim, suit or proceeding alleging patent infringement against Unity (or its Affiliates or sublicensees), Unity shall promptly notify Ascentage thereof in writing setting forth the facts of such claim in reasonable detail. As between the Parties, Unity will be entitled to control the defense in any such action(s). Unity agrees to keep Ascentage reasonably informed of all material developments in connection with any such claim, suit or proceeding as it relates to the Licensed Intellectual Property. Notwithstanding the above, Unity shall not admit the invalidity of any Licensed Patent without written consent from Ascentage.

7.4 Cooperation. In any legal action undertaken by a Party pursuant to Sections 7.2 or 7.3 of this Agreement (the Party bringing or defending such legal action, the "Enforcing Party"), the non-Enforcing Party shall cooperate fully with the Enforcing Party, including without limitation by joining as a party plaintiff if necessary for legal standing and executing such documents as the Enforcing Party may reasonably request. Upon the request of, and at the expense of, the Enforcing Party, the non-Enforcing Party shall make available at reasonable times and

under appropriate conditions all relevant personnel, records, papers, information, samples, specimens and other similar materials in its possession.

7.5 No Implied Obligations. Except as expressly provided in this Article 7, neither Party has any obligation to bring or prosecute actions or suits against any Third Party for patent infringement.

7.6 UM License Agreement. Notwithstanding the foregoing provisions of this Article 7, with respect to the Licensed Patents subject of the UM License Agreement, Unity's rights under this Article 7 shall be limited to the extent of Ascentage's rights to prosecute and enforce such Licensed Patents under the UM License Agreement, provided that (a) with respect to Royalty-bearing Product-Specific Patents that have been in-licensed from UM, to the extent the UM License Agreement will not permit Unity to control the prosecution of such patents, Ascentage agrees to (i) share with Unity the information Ascentage receives from UM under Section 7.2 of the UM License Agreement with respect to such patents, (ii) provide Unity with a reasonable opportunity to review and comment upon such information; and (iii) pass along to UM Unity's comments and requested actions, and (b) Ascentage shall at Unity's request and expense cooperate with Unity in order to allow Unity to exercise on Ascentage's behalf the enforcement rights granted to Ascentage under Section 8.1 of the UM License Agreement, in each case as permitted by the UM License Agreement.

OPTION FOR CHINA JOINT VENTURE

7.6 Option for China JVCO. Unity shall grant to Ascentage an option to commercialize one or more Royalty-bearing Products for use in the Field in Greater China jointly with Unity through a joint venture entity ("China JVCO") to be established in accordance with Section 8.4 of the Library Agreement("JVCO Option"). The process for exercise of the JVCO Option shall be agreed upon by [***] and [***] at [***].

7.7 Limitation of Obligations; Certain Covenants

8.2.1. Notwithstanding anything to the contrary, nothing in this Agreement shall be deemed to have granted Unity or any of its sublicensees the right to develop, manufacture, distribute, sell or otherwise commercialize the Royalty-bearing Products in the Greater China.

8.2.2 Ascentage hereby covenants that it shall not develop, manufacture, distribute, sell or otherwise commercialize (a) Unity Bcl-2 [***] Products or (b) the Licensed Compound (including any Licensed Products containing the Licensed Compound) for use in the Field in the Greater China except through the China JVCO. In the event of a breach by Ascentage of its obligations under this Section 8.2.2, the [***] and [***], shall [***].

8.2.3 Unity and Ascentage hereby covenant that they shall cooperate with respect to the establishment of the China JVCO, including without limitation by (a) initiating negotiation of the form agreements relating to the JVCO within [***] of the Effective Date, (b) using commercially reasonable efforts to reach agreement on such form agreements within [***] ([***]) [***] of the Effective Date, including ensuring that [***] and [***] devote at least [***] to such negotiations until such form agreements are agreed upon, and (c) signing the agreements for establishment of the China JVCO agreed upon by [***] and [***].

CONFIDENTIALITY

7.8 Confidential Information. Except as otherwise expressly provided herein, the parties agree that the receiving party shall not, except as expressly provided in this Article 9, disclose to any Third Party or use for any purpose any information which is disclosed to it by the other party, whether orally or in writing, and identified as confidential ("Confidential Information"), except to the extent that it can be established by the receiving party by competent proof that such information:

(a) Was already known to the receiving party, other than under an obligation of confidentiality, at the time of disclosure;

(b) Was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving party;

(c) Became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this Agreement;

(d) Was independently developed by the receiving party without reference to information provided by the disclosing party as demonstrated by documented evidence prepared contemporaneously with such independent development; or

(e) Was disclosed to the receiving party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the disclosing party not to disclose such information to others.

7.9 Permitted Use and Disclosures. Each party hereto may use or disclose Confidential Information of the other party to the extent such use or disclosure is reasonably necessary in the following instances: (a) exercising the rights granted to it hereunder (including, in the case of Unity, developing, commercializing and/or sublicensing of Royalty-bearing Products) or in carrying out its obligations hereunder; (b) filing or prosecuting Patents as permitted by this Agreement; (c) prosecuting or defending litigation; and (d) complying with applicable court orders or governmental regulations. Notwithstanding the foregoing, in the event a party is required to make a disclosure of the other party's Confidential Information pursuant to clause (c) or (d) of this Section 9.2, it will, except where impracticable, give reasonable advance notice to the disclosing party of such disclosure and use efforts to secure confidential treatment of such information at least as diligent as such party would use to protect its own confidential information, but in no event less than reasonable efforts. In addition, Unity shall have the right to disclose Confidential Information regarding the Licensed Compound or Licensed Products to Third Parties in connection with due diligence or similar investigations, to potential Third Party investors, and others on a need to know basis, in each case under terms of confidentiality that are appropriate for the circumstances, or to the extent required by law.

7.10 Nondisclosure of Terms. Each of the parties hereto agrees not to disclose the terms of this Agreement to any Third Party without the prior written consent of the other party hereto, which consent shall not be unreasonably withheld; provided that a party may disclose the terms of this Agreement without such consent to such party's attorneys and advisors, to Third Parties in

connection with due diligence or similar investigations, to potential Third Party investors, and others on a need to know basis, in each case under terms of confidentiality that are appropriate for the circumstances, or to the extent required by law.

7.11 Public Announcement. Unity may, in its discretion, issue a press release announcing the formation of this Agreement, which shall be substantially in a form approved by Ascentage prior to execution of the Agreement. Except with respect to such initial release or as otherwise required by law, neither party shall issue an additional press release or public announcement relating to this Agreement without the prior written approval of the other party, which shall not be withheld unreasonably. Either party may refer to the license granted under this Agreement in promotional and other communications with prospective customers and investors, subject to the prior written approval of the other party of the form, substance and intended use of such reference, and provided that such disclosure shall not include any technical details or any financial terms of the license. For purposes of clarification, after a party has obtained the other party's written approval of the form, substance and intended use of a particular reference, no further approval of the other party will be required for inclusion of the same reference in future communications that are intended for the same use.

ARTICLE 8
INDEMNIFICATION

8.1 Unity. Unity agrees to indemnify and defend Ascentage and its directors, officers, employees, agents and their respective successors, heirs and assigns (the "Ascentage Indemnitees") against any losses, costs, claims, damages, liabilities or expense (including reasonable attorneys' and professional fees and other expenses of litigation) (collectively, "Liabilities") arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, to the extent (a) relating to Licensed Products developed, manufactured, used, sold or otherwise distributed by or on behalf of Unity, its Affiliates, sublicensees or other designees (excluding Ascentage, its Affiliates and licensees) including, without limitation, product liability and patent infringement claims, or (b) resulting from a breach by Unity of its representations and warranties under this Agreement, except, in each case, to the extent such Liabilities result from the negligence or intentional misconduct of Ascentage or Ascentage's breach of its representations and warranties under this Agreement or the Supply Agreement to be negotiated pursuant to Article 4 above.

8.2 Ascentage. Ascentage agrees to indemnify and defend Unity and its directors, officers, employees, agents and their respective heirs and assigns (the "Unity Indemnitees") against any Liabilities arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, to the extent resulting from a breach by Ascentage of its representations and warranties under this Agreement or the Supply Agreement to be negotiated pursuant to Article 4 above, except, in each case, to the extent such Liabilities result from the negligence or intentional misconduct of Unity or Unity's breach of its representations and warranties under this Agreement.

8.3 Procedure. In the event that any party intends to claim indemnification under this Article 10 (each such party, an "Indemnitee") it shall promptly notify the other Party in writing of such alleged Liability. The indemnifying Party shall have the right to control the defense thereof

with counsel of its choice as long as such counsel is reasonably acceptable to Indemnitee; provided, however, that any Indemnitee shall have the right to retain its own counsel at its own expense, for any reason, including if representation of any Indemnitee by the counsel retained by the indemnifying Party would be inappropriate due to actual or potential differing interests between such Indemnitee and any other Party reasonably represented by such counsel in such proceeding. The indemnifying Party shall keep the Indemnitee regularly informed of the status of the defense of any action, claim or liability covered by this Article 10 and shall take into consideration the Indemnitee's reasonable comments thereon. The affected Indemnitee shall cooperate with the indemnifying Party and its legal representatives in the investigation of any action, claim or liability covered by this Article 10. The Indemnitee shall not compromise or settle any claim or suit, or voluntarily incur any expense with respect to any such claim or suit, in each case, without the prior written consent of the indemnifying Party, which such Party shall not be required to give. The failure to deliver written notice to the indemnifying Party within a reasonable time after the commencement of any action with respect to any action, claim or liability covered by this Article 10, if prejudicial to its ability to defend such action, shall relieve the indemnifying Party of any liability to the Indemnitee under this Article 10.

ARTICLE 9
REPRESENTATIONS AND WARRANTIES

9.1 General Warranties. Each Party represents and warrants to the other Party that it is a corporation duly organized and validly existing under the laws of the state or country of its incorporation, the execution, delivery and performance of this Agreement by such Party has been duly authorized by all requisite corporate action, and it has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder (including, in the case of Ascentage, granting the rights and licenses described in Article 2).

9.2 Ascentage Warranties. Ascentage represents and warrants on its own behalf and on behalf of its Affiliates that as of the Effective Date:

(a) except as otherwise disclosed to Unity in writing prior to the Effective Date, (i) Ascentage has not received written notice from a Third Party claiming that the Licensed Compound infringes the intellectual property rights of any Third Party, and (ii) Ascentage is not a party to any legal action, suit or proceeding relating to the Licensed Compound.

(b) except as otherwise disclosed to Unity in writing prior to the Effective Date, there are no actual or pending actions, suits or claims, by any Third Party (i) challenging the ownership of the Licensed Compound; or (b) challenging the validity, effectiveness, enforceability, or ownership of the Licensed Intellectual Property.

(c) except as otherwise disclosed to Unity in writing prior to the Effective Date, the Licensed Patents are subsisting, in force or pending, as the case may be, and are not the subject of any interference, reissue, reexamination, opposition, cancellation or similar administrative proceedings.

(d) except as otherwise disclosed to Unity in writing prior to the Effective Date, Ascentage has not brought a claim alleging an infringement by a Third Party of

any of the Licensed Patents and to Ascentage's actual knowledge, there is no actual or alleged infringement by a Third Party of any of the Patents within the Licensed Patents.

(e) there are no Patents: (a) filed by Ascentage and subsequently assigned to Third Party, or (b) with respect to which Ascentage or its Affiliates have acquired rights from a Third Party (i.e., through in-licenses, cross-licenses or otherwise), in each case that (i) would be required for Unity to research, develop, manufacture, use or commercialize the Licensed Compound and (ii) are not included within the Licensed Intellectual Property.

(f) except as otherwise disclosed to Unity in writing prior to the Effective Date, there are no actual or pending suits or claims by any Third Party asserting that the manufacture, use, sale, offer for sale or importing of the Licensed Compound infringes the intellectual property of a Third Party and to Ascentage's knowledge, the development and commercialization of the Licensed Compound would not infringe (i) any issued Patents of any Third Party (other than Patents in-licensed from UM), or (ii) any published Patent claim of any Third Party (other than claims of Patents in-licensed from UM) if such claim were to issue as published.

(g) Ascentage has disclosed to Unity all material agreements with Third Parties in effect as of the Effective Date pursuant to which Licensed Intellectual Property was licensed, acquired or sold, including without limitation all amendments to the UM License Agreement entered into by UM and Ascentage subsequent to the effective date of the License Agreement.

(h) Ascentage has not previously granted and will not grant any rights in the Licensed Intellectual Property that are inconsistent with the rights and licenses granted to Unity herein.

9.3 Certain Rights and Obligations under the UM License Agreement.

(a) Ascentage shall not modify, amend or otherwise alter the UM License Agreement to the extent the same would materially and adversely affect Unity's rights under this Agreement.

(b) Ascentage shall not (a) exercise or fail to exercise any right under the UM License Agreement or (b) provide or fail to provide any consent or approval with respect to any right or obligation under the UM License Agreement, in each case to the extent the same would materially and adversely affect Unity's rights under this Agreement.

(c) Ascentage shall not unilaterally terminate the UM License Agreement.

9.4 Disclaimer. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTIES TO THE OTHER PARTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, REGARDING THE LICENSED COMPOUND, LICENSED PRODUCTS, UNITY BCL-2 SYSTEMIC PRODUCTS OR THE LICENSED INTELLECTUAL PROPERTY, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A

PARTICULAR PURPOSE, NONINFRINGEMENT, AND VALIDITY OF LICENSED INTELLECTUAL PROPERTY CLAIMS, ISSUED OR PENDING.

9.5 Limitation of Liability. EXCEPT FOR LIABILITY FOR BREACH OF ARTICLE 9, NEITHER PARTY SHALL BE ENTITLED TO RECOVER FROM THE OTHER PARTY ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH THIS AGREEMENT; *provided, however,* that this Section 11.5 shall not be construed to limit either party's indemnification obligations under Article 10.

ARTICLE 10
TERM AND TERMINATION

10.1 Term. The term of this Agreement shall commence on the Effective Date and, unless earlier terminated as provided in this Article 12, shall continue in full force and effect on a country-by-country basis until the expiration of all royalty obligations pursuant to this Agreement for such country, as provided in Section 5.4 above. Unity's license with respect to the Licensed Technology shall survive the expiration (but not an earlier termination) of this Agreement, provided that such license shall thereafter become nonexclusive and fully paid-up.

10.2 Termination for Breach. Either Party may terminate this Agreement in the event that the other Party shall have materially breached or defaulted in the performance of any of its material obligations hereunder, and such breach or default shall have continued for sixty (60) days after written notice of such breach and intent to terminate this Agreement therefor was provided to the breaching Party by the nonbreaching Party. Any such termination shall become effective at the end of such sixty (60) day period unless the breaching Party has cured any such breach or default prior to the expiration of the sixty (60) day period. Notwithstanding the foregoing, if the Party alleged to be in breach of this Agreement in good faith disputes such breach within such sixty (60) day period, the nonbreaching Party shall not have the right to terminate this Agreement unless it has been determined by arbitration pursuant to Section 13.2 that this Agreement was materially breached, and the breaching Party fails to comply with its obligations hereunder within sixty (60) days after such determination.

10.3 Termination by Unity. Any provision herein notwithstanding, Unity may terminate this Agreement, in its entirety or as to any particular Patent within the Licensed Patents, or as to any particular Licensed Product, at any time by giving Ascentage at least ninety (90) days prior written notice. From and after the effective date of a termination under this Section 12.3 with respect to a particular Patent in a particular country, such Patent shall cease to be within the Licensed Patents for all purposes of this Agreement, and all rights and obligations of Unity with respect to such Patent(s) shall terminate. From and after the effective date of a termination under this Section 12.3 with respect to a particular Licensed Product, the license granted under Section 2.1 above shall terminate with respect to such Licensed Product, and the same shall cease to be a Licensed Product for all purposes of this Agreement. Upon a termination of this Agreement in its entirety under this Section 12.3, all rights and obligations of the parties shall terminate, except as provided in Section 12.4 below. For clarity, Unity shall remain obligated to pay any and all milestone and other payments accrued, due and payable to Ascentage prior to such termination.

10.4 Effect of Termination.

10.4.1 Accrued Obligations. Expiration or any termination of this Agreement shall not release either Party hereto from any liability which at the time of such expiration or termination has already accrued to such Party or which is attributable to a period prior to such expiration or termination, subject to the terms of this Agreement, nor preclude either Party from pursuing any rights and remedies it may have hereunder or at law or in equity which accrued to it prior to such expiration or termination, subject to the terms of this Agreement.

10.4.2 Sales of Existing Inventory of Licensed Product. In the event this Agreement is terminated for any reason with respect to a Licensed Product after the first approval of an MAA for such Licensed Product, Unity shall provide Ascentage with a written inventory of all quantities of such Licensed Product that Unity and its Affiliates have in stock and, for a period of [***] ([***]) [***] after such termination, Unity and its Affiliates shall have the right to sell or otherwise dispose of such Licensed Product, all subject to the payment to Ascentage of royalties pursuant to Article 5 hereof.

10.4.3 Survival of Sublicenses. Upon termination of this Agreement for any reason, any sublicense granted by Unity hereunder to a Third Party Sublicensee shall survive, provided that such Third Party Sublicensee continues to pay to Ascentage the milestones and royalties that would have been due to Ascentage under this Agreement based on such Third Party Sublicensee's activities had this Agreement not terminated. For clarity, in the event that a Third Party Sublicensee fails to pay to Ascentage the applicable milestones and royalties due to Ascentage based on such Third Party Sublicensee's activities, Ascentage shall be entitled to terminate such surviving sublicense by providing such Third Party Sublicensee written notice of termination, which notice shall take effect [***] ([***]) days after it is received by such Third Party Sublicensee unless such Third Party Sublicensee has cured any such breach or default prior to the expiration of the [***] ([***]) day period.

10.4.4 Library Agreement. This Agreement is independent of, and shall not be affected by, the expiration or termination of the Library Agreement, and vice versa.

10.4.5 Survival. Articles 1 (Definitions), 6 (Accounting; Records; Method of Payment), 9 (Confidentiality), 10 (Indemnification), 13 (Dispute Resolution) and 14 (Miscellaneous), and Sections 2.1.1(b), 2.1.2(c), 5.2.2, 5.3.2 and 5.4-5.8, (with respect to [***]), 7.2.1 (with respect to any ongoing Enforcement Action), 11.3, 11.4 and 12.4 shall survive the expiration or termination of this Agreement for any reason, provided that such survival shall be contingent upon Unity having fulfilled its obligations under Section 5.1.1. Except as otherwise provided in this Article 12, all rights and obligations of the parties under this Agreement shall terminate upon the expiration or termination of this Agreement.

10.5 Condition Precedent.

10.5.1 This Agreement is entered into subject to the condition precedent that Ascentage and UM agree upon and execute an amendment to the UM License Agreement ("Second Amendment") adjusting the royalties owing to UM in connection with the activities contemplated by this Agreement (including the attached Exhibits). All rights and obligations set forth in the

Agreement shall only become effective upon the Effective Date.

10.5.2 Ascentage hereby agrees to use its commercially best efforts to complete and execute the Second Amendment as soon as reasonably practicable.

ARTICLE 11
DISPUTE RESOLUTION

11.1 Dispute Resolution. If an unresolved dispute arises out of or relates to this Agreement, or the breach thereof, either Party may refer such dispute to the [***] of Unity and Ascentage, who shall meet in person or by telephone within [***] ([***]) days after such referral to attempt in good faith to resolve such dispute. If such matter cannot be resolved by discussion of such officers within such [***] ([***]) days period (as may be extended by mutual agreement), either Party shall be entitled to seek resolution of such dispute pursuant to Section 13.2 below.

11.2 Arbitration. If the parties are unable to resolve a dispute on an issue of interpretation, breach or enforcement of this Agreement, the parties shall refer such dispute to be finally resolved by binding arbitration under the terms of this Section 13.2, except that all disputes with respect to the validity or infringement of Patents shall be subject to applicable federal court jurisdiction and not subject to the terms of this Section 13.2. Whenever a party shall decide to institute arbitration proceedings, it shall give written notice to that effect to the other party. Any such arbitration shall be conducted under the [***] by a panel of three (3) arbitrators in [***]. Each party shall select one (1) arbitrator who is not employed by, or otherwise affiliated with, such party within [***] ([***]) days after the institution of arbitration proceedings, and the two (2) arbitrators so selected shall designate the third arbitrator. The parties shall use their commercially reasonable efforts to conclude the arbitration hearings within [***] ([***]) [***] following the confirmation of the third and presiding arbitrator.

11.3 Injunctive Relief. Each Party shall be free to seek preliminary or permanent injunctive relief, restraining order or degree of specific performance in any court of competent jurisdiction. For avoidance of doubt, any such equitable remedies provided under this Section 13.3 shall be cumulative and not exclusive and are in addition to any other remedies, which either Party may have under this Agreement or applicable law.

ARTICLE 12
MISCELLANEOUS

12.1 Governing Laws. This Agreement and any dispute arising from the construction, performance or breach hereof shall be governed by and construed, and enforced in accordance with, the laws of the state of New York, USA, without reference to conflicts of laws principles.

12.2 Waiver. It is agreed that no waiver by either Party hereto of any breach or default of any of the covenants or agreements herein set forth shall be deemed a waiver as to any subsequent and/or similar breach or default.

12.3 Assignment. This Agreement shall not be assignable by either party without the written consent of the other party hereto, except that either party may assign this Agreement, without such consent, to an entity that acquires all or substantially all of the business or assets of

such party to which this Agreement relates, whether by merger, reorganization, acquisition, sale, or otherwise; provided, however, that within [***] ([***]) days of such an assignment, the assignee shall agree in writing to be bound by the terms and conditions of this Agreement. Subject to the foregoing, this Agreement shall bind and inure to the benefit of each party's successors and permitted assigns.

12.4 Independent Contractors. The relationship of the Parties hereto is that of independent contractors. The Parties hereto are not deemed to be agents, partners or joint venturers of the others for any purpose as a result of this Agreement or the transactions contemplated thereby.

12.5 Compliance with Laws. In exercising their rights under this Agreement, the Parties shall fully comply in all material respects with the requirements of any and all applicable laws, regulations, rules and orders of any governmental body having jurisdiction over the exercise of rights under this license including, without limitation, those applicable to the discovery, development, manufacture, distribution, import and export and sale of Licensed Products pursuant to this Agreement.

12.6 Notices. All notices, requests and other communications hereunder shall be in writing and shall be personally delivered or by registered or certified mail, return receipt requested, postage prepaid, in each case to the respective address specified below, or such other address as may be specified in writing to the other Parties hereto and shall be deemed to have been given upon receipt:

If to Unity: Unity Biotechnology, Inc.
1700 Owens Street, Suite 535
San Francisco, CA 94158, USA
Attention: [***]
Email: [***]

If to Ascentage: Ascentage Pharma Group Corp. Ltd.
Room 201, QB3 Building, Medical City Avenue
Hi-Tech BioMed District, Taizhou City, Jiangsu Province
P.R. China, 225300
Attention: [***]
Email: [***]

12.7 Severability. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect to the fullest extent permitted by law without said provision, and the Parties shall amend the Agreement to the extent feasible to lawfully include the substance of the excluded term to as fully as possible realize the intent of the Parties and their commercial bargain.

12.8 Advice of Counsel. Unity and Ascentage have each consulted counsel of their choice regarding this Agreement, and each acknowledges and agrees that this Agreement shall not be deemed to have been drafted by one Party or another and will be construed accordingly.

12.9 Performance Warranty. Each Party hereby warrants and guarantees the performance of any and all rights and obligations of this Agreement by its Affiliates, licensees and sublicensees.

12.10 Force Majeure. Neither Party shall lose any rights hereunder or be liable to the other Party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting Party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, unusual and unexpected governmental intervention, failure of suppliers, or any other reason where failure to perform is beyond the reasonable control and not caused by the negligence, intentional conduct or misconduct of the non-performing Party and such Party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a Party be required to settle any labor dispute or disturbance.

12.11 Complete Agreement. This Agreement with its schedules, together with the Library Agreement and its exhibits, constitutes the entire agreement, both written and oral, between the Parties with respect to the subject matter hereof, and all prior agreements respecting the subject matter hereof, either written or oral, express or implied, shall be abrogated, canceled, and are null and void and of no effect. No amendment or change hereof or addition hereto shall be effective or binding on either of the Parties hereto unless reduced to writing and executed by the respective duly authorized representatives of Unity and Ascentage.

12.12 Headings. The captions to the several Sections and Articles hereof are not a Part of this Agreement, but are included merely for convenience of reference and shall not affect its meaning or interpretation.

12.13 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same agreement.

12.14 Bankruptcy. All rights and licenses granted under or pursuant to this Agreement by each Party as a licensor are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title ll, U.S. Code (the "Bankruptcy Code"), licenses of rights to "intellectual property" as defined under section 101(35A) of the Bankruptcy Code. The Parties agree that each licensee of such rights under this Agreement, shall retain and may fully exercise all rights and elections it would have in the case of a licensor bankruptcy under the Bankruptcy Code. Each Party agrees during the term of this Agreement to create or maintain current copies, or if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such intellectual property licensed to the other Party.

IN WITNESS WHEREOF, the Parties hereto have caused their duly authorized representatives to execute this Agreement.

ASCENTAGE PHARMA GROUP CORP. LTD.	UNITY BIOTECHNOLOGY, INC.
By:/s/ Dajun Yang	By: /s/ Nathaniel David
Name: Dajun Yang, MD, PhD	Name: Nathaniel David, PhD
Title: Chief Executive Officer	Title: Chief Executive Officer

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

SCHEDULE 1.2

APG-1252

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

SCHEDULE 5.1

FORM OF STOCK ISSUANCE AGREEMENT

UNITY BIOTECHNOLOGY, INC.

RESTRICTED STOCK GRANT AGREEMENT

This Restricted Stock Grant Agreement (the "**Agreement**") is made as of [●] by and between Unity Biotechnology, Inc., a Delaware corporation (the "**Company**"), and Ascentage Pharma Group Corp. Ltd. (the "**Grantee**").

In consideration of the mutual covenants and representations set forth below, the Company and Grantee agree as follows:

1. *Grant of the Shares*. Subject to the terms and conditions of this Agreement, the Company agrees to grant to Grantee, and Grantee agree to acquire from the Company, on the Closing (as defined below) [●] shares of the Company's Common Stock, $0.0001 par value per share (the "**Shares**"), as consideration for services to be provided by Grantee to the Company.

2. *Closing*. The transfer of the Shares shall occur at a closing (the "**Closing**") to be held on the date first set forth above, or at any other time mutually agreed upon by the Company and Grantee. The Closing will take place at the principal office of the Company or at such other place as shall be designated by the Company. As promptly after the Closing as practicable, the Company will issue a stock certificate, registered in the name of Grantee, reflecting the Shares.

3. Restrictions on Transfer.

A. *Investment Representations and Legend Requirements.* The Grantee hereby make the investment representations listed on **Exhibit A** to the Company as of the date of this Agreement and as of the date of the Closing, and agrees that such representations are incorporated into this Agreement by this reference, such that the Company may rely on them in issuing the Shares. Grantee understand and agree that the Company shall cause the legends set forth below, or substantially equivalent legends, to be placed upon any certificate(s) evidencing ownership of the Shares, together with any other legends that may be required by the Company or by applicable state or federal securities laws:

> THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SUCH ACT AND/OR APPLICABLE STATE SECURITIES LAWS, OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL OR OTHER EVIDENCE, REASONABLY SATISFACTORY TO THE

COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER, A RIGHT OF FIRST REFUSAL, AND A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE RESTRICTED STOCK GRANT AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS, RIGHT OF FIRST REFUSAL AND LOCK-UP PERIOD ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO TRANSFER MAY BE EFFECTED WITHOUT AN EFFCTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

B. *Stop-Transfer Notices*. Grantee agree that to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

C. *Refusal to Transfer*. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any acquirer or other transferee to whom such Shares shall have been so transferred

D. *Lock-Up Period*. Grantee hereby agree that Grantee shall not sell, offer, pledge, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, grant any right or warrant to purchase, lend or otherwise transfer or encumber, directly or indirectly, any Shares or other securities of the Company, nor shall Grantee enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Shares or other securities of the Company, during the period from the filing of the first registration statement of the Company filed under the Securities Act of 1933, as amended (the "**Securities Act**"), that includes securities to be sold on behalf of the Company to the public in an underwritten public offering under the Securities Act through the end of the 180-day period following the effective date of such registration statement (or such other

period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. Grantee further agree, if so requested by the Company or any representative of its underwriters, to enter into such underwriter's standard form of "lockup" or "market standoff" agreement in a form satisfactory to the Company and such underwriter. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of any such restriction period.

4. *Company's Right of First Refusal*. Before any Shares acquired by the Grantee pursuant to this Agreement (or any beneficial interest in such Shares) may be sold, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Grantee or any subsequent transferee (each a "**Holder**"), such Holder must first offer such Shares or beneficial interest to the Company and/or its assignee(s) as follows:

A. *Notice of Proposed Transfer*. The Holder shall deliver to the Company a written notice stating: (i) the Holder's bona fide intention to sell or otherwise transfer the Shares; (ii) the name of each proposed transferee; (iii) the number of Shares to be transferred to each proposed transferee; (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares; and (v) that by delivering the notice, the Holder offers all such Shares to the Company and/or its assignee(s) pursuant to this section and on the same terms described in the notice.

B. *Exercise of Right of First Refusal*. At any time within 30 days after receipt of the Holder's notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the proposed transferees, at the purchase price determined in accordance with Section 4.C.

C. *Purchase Price*. The purchase price for the Shares purchased by the Company and/or its assignee(s) under this section shall be the price listed in the Holder's notice. If the price listed in the Holder's notice includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in its sole discretion.

D. *Payment*. Payment of the purchase price shall be made, at the option of the Company and/or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company and/or its assignee(s), or by any combination thereof within 30 days after receipt by the Company of the Holder's notice (or at such later date as is called for by such notice).

E. *Holder's Right to Transfer*. If all of the Shares proposed in the notice to be transferred to a given proposed transferee are not purchased by the Company and/or its assignee(s) as provided in this section, then the Holder may sell or otherwise transfer such Shares to that

proposed transferee; *provided that*: (i) the transfer is made only on the terms provided for in the notice, with the exception of the purchase price, which may be either the price listed in the notice or any higher price; (ii) such transfer is consummated within 60 days after the date the notice is delivered to the Company; (iii) the transfer is effected in accordance with any applicable securities laws, and if requested by the Company, the Holder shall have delivered an opinion of counsel acceptable to the Company to that effect; and (iv) the proposed transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section. If any Shares described in a notice are not transferred to the proposed transferee within the period provided above, then before any such Shares may be transferred, a new notice shall be given to the Company, and the Company and/or its assignees shall again be offered the right of first refusal described in this section.

F. *Exception for Certain Family Transfers*. Notwithstanding anything to the contrary contained elsewhere in this section, the transfer of any or all of the Shares during the Holder's lifetime or on the Holder's death by will or intestacy to (i) the Holder's spouse; (ii) the Holder's lineal descendants or antecedents, siblings, aunts, uncles, cousins, nieces and nephews (including adoptive relationships and step relationships), and their spouses; (iii) the lineal descendants or antecedents, siblings, cousins, aunts, uncles, nieces and nephews of Holder's spouse (including adoptive relationships and step relationships), and their spouses; and (iv) a trust or other similar estate planning vehicle for the benefit of the Holder or any such person, shall be exempt from the provisions of this section; *provided* that, in each such case, the transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section; and *provided further*, that without the prior written consent of the Company, which may be withheld in the sole discretion of the Company, no more than three transfers may be made pursuant to this section, including all transfers by the Holder and all transfers by any transferee.

G. *Termination of Right of First Refusal*. The right of first refusal contained in this section shall terminate as to all Shares acquired hereunder upon the earlier of: (i) the closing date of the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act, and (ii) the closing date of a Change of Control pursuant to which the holders of the outstanding voting securities of the Company receive securities of a class registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended. For purposes of this Agreement, a "**Change of Control**" means either: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation or stock transfer, but excluding any such transaction effected primarily for the purpose of changing the domicile of the Company), unless the Company's stockholders of record immediately prior to such transaction or series of related transactions hold, immediately after such transaction or series of related transactions, at least 50% of the voting power of the surviving or acquiring entity (*provided* that the sale by the Company of its securities for the purposes of raising additional funds shall not constitute a Change of Control hereunder); or (ii) a sale of all or substantially all of the assets of the Company.

5. *General Provisions*.

A. *Choice of Law*. This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of the State of California.

B. *Integration*. This Agreement, including all exhibits hereto, represents the entire agreement between the parties with respect to the acquisition of the Shares by the Grantee and supersedes and replaces any and all prior written or oral agreements regarding the subject matter of this Agreement including, but not limited to, any representations made during any interviews, relocation discussions or negotiations whether written or oral.

C. *Notices*. Any notice, demand, offer, request or other communication required or permitted to be given by either the Company or the Grantee pursuant to the terms of this Agreement shall be in writing and shall be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one business day after being delivered by facsimile (with receipt of appropriate confirmation), (iv) one business day after being deposited with an overnight courier service or (v) four days after being deposited in the U.S. mail, First Class with postage prepaid and return receipt requested, and addressed to the parties at the addresses provided to the Company (which the Company agrees to disclose to the other parties upon request) or such other address as a party may request by notifying the other in writing.

D. *Successors*. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this section or which becomes bound by the terms of this Agreement by operation of law. Subject to the restrictions on transfer set forth in this Agreement, this Agreement shall be binding upon Grantee and their heirs, executors, administrators, successors and assigns.

E. *Assignment; Transfers.* Except as set forth in this Agreement, this Agreement, and any and all rights, duties and obligations hereunder, shall not be assigned, transferred, delegated or sublicensed by the Grantee without the prior written consent of the Company. Any attempt by the Grantee without such consent to assign, transfer, delegate or sublicense any rights, duties or obligations that arise under this Agreement shall be void. Except as set forth in this Agreement, any transfers in violation of any restriction upon transfer contained in any section of this Agreement shall be void, unless such restriction is waived in accordance with the terms of this Agreement.

F. *Waiver*. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, nor prevent that party from thereafter enforcing any other provision of this Agreement. The rights granted both parties hereunder are cumulative and shall not constitute a waiver of either party's right to assert any other legal remedy available to it.

G. *Grantee Investment Representations and Further Documents*. The Grantee agree upon request to execute any further documents or instruments necessary or reasonably

desirable in the view of the Company to carry out the purposes or intent of this Agreement, including (but not limited to) the applicable exhibits and attachments to this Agreement.

H. *Severability*. Should any provision of this Agreement be found to be illegal or unenforceable, the other provisions shall nevertheless remain effective and shall remain enforceable to the greatest extent permitted by law.

I. *Rights as Stockholder*. Subject to the terms and conditions of this Agreement, Grantee shall have all of the rights of a stockholder of the Company with respect to the Shares from and after the date that Grantee deliver a fully executed copy of this Agreement (including the applicable exhibits and attachments to this Agreement) and full payment for the Shares to the Company, and until such time as Grantee dispose of the Shares in accordance with this Agreement. Upon such transfer, Grantee shall have no further rights as a holder of the Shares so purchased except (in the case of a transfer to the Company) the right to receive payment for the Shares so purchased in accordance with the provisions of this Agreement, and Grantee shall forthwith cause the certificate(s) evidencing the Shares so purchased to be surrendered to the Company for transfer or cancellation.

J. *Adjustment for Stock Split.* All references to the number of Shares and the purchase price of the Shares in this Agreement shall be adjusted to reflect any stock split, stock dividend or other change in the Shares which may be made after the date of this Agreement.

K. *Reliance on Counsel and Advisors.* Grantee acknowledge that Wilson Sonsini Goodrich & Rosati, Professional Corporation, is representing only the Company in this transaction. Grantee acknowledges that he or she has had the opportunity to review this Agreement, including all attachments hereto, and the transactions contemplated by this Agreement with his or her own legal counsel, tax advisors and other advisors. Grantee are relying solely on his or her own counsel and advisors and not on any statements or representations of the Company or its agents for legal or other advice with respect to this investment or the transactions contemplated by this Agreement.

L. *Counterparts.* This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Facsimile copies of signed signature pages shall be binding originals.

(*Signature page follows*)

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement.

COMPANY:

UNITY BIOTECHNOLOGY, INC.

By:
Name: Dr. Nathaniel E. David
Title:President and Chief Executive Officer

[*Signature Page to Restricted Stock Grant Agreement*]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement. The Grantee agrees to notify the Company of any change in its address below.

GRANTEE:

ASCENTAGE PHARMA GROUP CORP. LTD.

Name:
Title:

Address:

11/F, AXA Centre
Gloucester Road,
Wanchai Hong Kong

[*Signature Page to Restricted Stock Grant Agreement*]

EXHIBIT A

INVESTMENT REPRESENTATION STATEMENT

GRANTEE	:	ASCENTAGE PHARMA GROUP CORP. LTD.
COMPANY	:	UNITY BIOTECHNOLOGY, INC.
SECURITY	:	COMMON STOCK
AMOUNT	:	[●] SHARES
DATE	:	[●]

In connection with the acquisition of the above-listed shares, I, each of the undersigned, represent to the Company as follows:

1. ***The Company may rely on these representations*.** I understand that the Company's sale of the shares to me has not been registered under the Securities Act of 1933, as amended (the "**Securities Act**"), because the Company believes, relying in part on my representations in this document, that an exemption from such registration requirement is available for such sale. I understand that the availability of this exemption depends upon the representations I am making to the Company in this document being true and correct.

2. ***I am purchasing for investment*.** I am purchasing the shares solely for investment purposes, and not for further distribution. My entire legal and beneficial ownership interest in the shares is being acquired and shall be held solely for my account, except to the extent I intend to hold the shares jointly with my spouse. I am not a party to, and do not presently intend to enter into, any contract or other arrangement with any other person or entity involving the resale, transfer, grant of participation with respect to or other distribution of any of the shares. My investment intent is not limited to my present intention to hold the shares for the minimum capital gains period specified under any applicable tax law, for a deferred sale, for a specified increase or decrease in the market price of the shares, or for any other fixed period in the future.

3. ***I can protect my own interests*.** I can properly evaluate the merits and risks of an investment in the shares and can protect my own interests in this regard, whether by reason of my own business and financial expertise, the business and financial expertise of certain professional advisors unaffiliated with the Company with whom I have consulted, or my preexisting business or personal relationship with the Company or any of its officers, directors or controlling persons.

4. ***I am informed about the Company*.** I am sufficiently aware of the Company's business affairs and financial condition to reach an informed and knowledgeable decision to acquire the shares. I have had opportunity to discuss the plans, operations and financial condition of the Company with its officers, directors or controlling persons, and have received all information I deem appropriate for assessing the risk of an investment in the shares.

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

5. ***I recognize my economic risk.*** I realize that the acquisition of the shares involves a high degree of risk, and that the Company's future prospects are uncertain. I am able to hold the shares indefinitely if required, and am able to bear the loss of my entire investment in the shares.

6. ***I know that the shares are restricted securities.*** I understand that the shares are "restricted securities" in that the Company's sale of the shares to me has not been registered under the Securities Act in reliance upon an exemption for non-public offerings. In this regard, I also understand and agree that:

A. I must hold the shares indefinitely, unless any subsequent proposed resale by me is registered under the Securities Act, or unless an exemption from registration is otherwise available (such as Rule 144);

B. the Company is under no obligation to register any subsequent proposed resale of the shares by me; *and*

C. the certificate evidencing the shares will be imprinted with a legend which prohibits the transfer of the shares unless such transfer is registered or such registration is not required in the opinion of counsel for the Company.

7. ***I am familiar with Rule 144.*** I am familiar with Rule 144 adopted under the Securities Act, which in some circumstances permits limited public resales of "restricted securities" like the shares acquired from an issuer in a non-public offering. I understand that my ability to sell the shares under Rule 144 in the future is uncertain, and may depend upon, among other things: (i) the availability of certain current public information about the Company; (ii) the resale occurring more than a specified period after my acquisition and full payment (within the meaning of Rule 144) for the shares; and (iii) if I am an affiliate of the Company (A) the sale being made in an unsolicited "broker's transaction", transactions directly with a market maker or riskless principal transactions, as those terms are defined under the Securities Exchange Act of 1934, as amended, (B) the amount of shares being sold during any three-month period not exceeding the specified limitations stated in Rule 144, *and* (C) timely filing of a notice of proposed sale on Form 144, if applicable.

8. ***I know that Rule 144 may never be available.*** I understand that the requirements of Rule 144 may never be met, and that the shares may never be saleable under the rule. I further understand that at the time I wish to sell the shares, there may be no public market for the Company's stock upon which to make such a sale, or the current public information requirements of Rule 144 may not be satisfied, either of which may preclude me from selling the shares under Rule 144 even if the relevant holding period had been satisfied.

9. ***I know that I am subject to further restrictions on resale.*** I understand that in the event Rule 144 is not available to me, any future proposed sale of any of the shares by me will not be possible without prior registration under the Securities Act, compliance with some other registration exemption (which may or may not be available), or *each* of the following: (i) my written notice to the Company containing detailed information regarding the proposed sale, (ii) my providing an opinion of my counsel to the effect that such sale will not require registration, and (iii) the Company notifying me in writing that its counsel concurs in such opinion. I understand

that neither the Company nor its counsel is obligated to provide me with any such opinion. I understand that although Rule 144 is not exclusive, the Staff of the SEC has stated that persons proposing to sell private placement securities other than in a registered offering or pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

10. ***I know that I may have tax liability due to the uncertain value of the shares*.** I understand that the Board of Directors believes its valuation of the shares represents a fair appraisal of their worth, but that it remains possible that, with the benefit of hindsight, the Internal Revenue Service may successfully assert that the value of the shares on the date of my acquisition is substantially greater than the Board's appraisal. I understand that any additional value ascribed to the shares by such an IRS determination will constitute ordinary income to me as of the acquisition date, and that any additional taxes and interest due as a result will be my sole responsibility payable only by me, and that the Company need not and will not reimburse me for that tax liability.

11. ***Non-U.S. Investor***. If I am not a United States person, I hereby represents that I am satisfied as to the full observance of the laws of my jurisdiction in connection with any invitation to receive the shares issuable pursuant to this Agreement, or any use of this Agreement, including (i) the legal requirements within my jurisdiction for the acquisition of the shares pursuant to this Agreement, (ii) any foreign exchange restrictions applicable to such receipt or transfer, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the acquisition, holding, redemption, sale or transfer of such securities. My subscription for, and my continued beneficial ownership of the shares will not violate any applicable securities or other laws of my jurisdiction.

12. ***Principal Place of Business*.** The address of my principal place of business is set forth on the signature page below.

By signing below, the undersigned acknowledge their agreement with each of the statements contained in this Investment Representation Statement as of the date first set forth above, and their intent for the Company to rely on such statements in issuing the shares to me.

ASCENTAGE PHARMA GROUP CORP. LTD.

Address of Grantee' Principal Place of Business:

11/F AXA Centre
Gloucester Road, Wanchai
Hong Kong

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit 10.17

FIRST AMENDMENT TO APG1252 LICENSE AGREEMENT

This Amendment (the "Amendment"), dated as of March 28, 2018 (the Amendment Effective Date") is made by and between Ascentage Pharma Group Corp. Ltd., a Hong Kong corporation ("Ascentage"), with a business address at 11/F, AXA CENTRE, Gloucester Road, Wanchai, Hong Kong, and Unity Biotechnology, Inc., a Delaware corporation ("Unity"), with a business address at 3280 Bayshore Blvd, Suite 100, Brisbane, California 95002. Ascentage and Unity are sometimes referred to herein as individually as a "Party" and collectively as the "Parties".

BACKGROUND

A. The Parties entered into a Compound Library and Option Agreement (the "Library Agreement") dated February 2, 2016 (the "Original Effective Date"), which granted Unity the right to screen Ascentage's collection of BCL-2/BCL-xL inhibitor compounds as well as additional BCL-2/BCL-xL inhibitor compounds discovered by Ascentage during the term of the Library Agreement, including pursuant to that certain Research Services Agreement between the Parties dated February 2, 2016 (collectively, the "BCL Compounds") to identify compounds with potential utility in the treatment of age-related conditions other than Oncology Indications. Defined terms used herein and not otherwise defined shall have the meanings ascribed in the Library Agreement.

B. On the Original Effective Date the Parties also entered the APG1252 License Agreement (the "1252 License Agreement") pursuant to which Ascentage granted Unity exclusive rights to a BCL Compound known as APG-1252 for the prophylaxis and treatment of, and palliation of symptoms associated with, age related indications other than Oncology Indications.

C. Ascentage is also a party to a License Agreement with the Regents of the University of Michigan ("Michigan") dated December 1, 2010 (as amended on May 30, 2013, February 2, 2016, May 10, 2017 and June 1, 2017, the "Michigan License Agreement"), pursuant to which Michigan granted Ascentage exclusive rights, with the right to sublicense, under certain Michigan patents which cover, among other things, the BCL Compounds.

D. The Michigan License Agreement provides for Ascentage to pay Michigan twenty percent (20%) of Ascentage's Gross Sublicensing Revenues (as defined therein) and further provides that in the event a portion of Gross Sublicensing Revenues includes non-cash consideration, the relevant Ascentage sublicensee shall be required to issue such non-cash consideration directly to Michigan.

E. Each of the Library Agreement and the 1252 License Agreement provided for certain payments to be made by Unity to Ascentage in the form of shares of Unity common stock including (i) in each case, an upfront payment that was due within [***] ([***]) days of the Original Effective Date (the "Upfront Equity Payments"), and (ii) in the case of the 1252 License Agreement, additional payments upon the achievement of certain development milestones (the "Milestone Equity Payments" and, together with the Upfront Equity Payments, the "Unity Equity Payments")

F. Pursuant to the terms of the Michigan License Agreement (i) twenty percent (20%) of each Unity Equity Payment is owed by Ascentage to Michigan as a sublicense fee, and (ii) Ascentage is required to cause Unity to issue such Unity Equity Payments directly to Michigan.

G. On or around the Original Effective Date, in order to enable Ascentage to satisfy its sublicense fee payment obligations to Michigan with respect to the Upfront Equity Payments, the Parties

agreed that Unity should issue twenty percent (20%) of the Upfront Equity Payments directly to Michigan. Therefore, Unity bifurcated its issuance of the Upfront Equity Payments and issued eighty percent (80%) of the shares of common stock to Ascentage and twenty percent (20%) portion of the shares of common stock to Michigan. A schedule of the Upfront Equity Payments that were due and made to each party is set forth on Exhibit A hereto.

H. The Parties now wish to set forth and document their understanding and agreement about the manner in which the Upfront Equity Payments were made as well as the manner in which any additional Milestone Equity Payments will be made in connection under the 1252 License Agreement. Except as expressly modified hereby, the 1252 License Agreement shall continue in full force according to its terms.

NOW, THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, it is agreed by and between the Parties as follows:

AGREEMENT

1. Upfront Equity Payments.

(a) On February 17, 2016, pursuant to Restricted Stock Grant Agreement, Unity granted Ascentage a total of 1,573,340 shares of Unity common stock, of which 1,258,672 shares represented Ascentage's eighty percent (80%) portion of the Upfront Equity Payment due under the 1252 License Agreement.

(b) On February 17, 2016, pursuant to a separate Restricted Stock Grant Agreement, Unity granted Michigan a total 393,335 shares of Unity common stock, of which 314,668 shares represented Michigan's twenty percent (20%) portion of the Upfront Equity Payment due under the 1252 License Agreement.

(c) Ascentage acknowledges and agrees that (i) the Upfront Equity Payment to Michigan described in Section 1(b) above was made by Unity on behalf of Ascentage in order to satisfy Ascentage's obligation to make sublicense fee payments to Michigan under the Michigan License Agreement, (ii) that the Upfront Equity Payment to Ascentage described in Section 1(a) represented the full balance of the Upfront Equity Payments owed to Ascentage, and (iii) therefore Unity has fully and completely satisfied and discharged its obligation to make the Upfront Equity Payment due under the 1252 License Agreement.

2. Milestone Equity Payments. To address the fact that Unity will be required to issue twenty percent (20%) of each Milestone Equity Payment directly to Michigan to satisfy Ascentage's sublicense fee payment obligation to Michigan under the Michigan License Agreement, the Parties hereby agree to make the amendments set forth below to the 1252 License Agreement.

(a) Section 5.1.2 is hereby amended in its entirety to read as follows:

5.1.2 [***]. Upon the [***], Unity shall make the following issuances of its common stock:

(a) Unity shall issue to Ascentage Three Hundred Fourteen Thousand Six Hundred Sixty-Eight (314,668) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) within [***] ([***]) days of date that [***] occurs.

(b) Unity shall issue to UM Seventy-Eight Thousand Six Hundred Sixty-Seven (78,667) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) within [***] ([***]) days after the date the shares described in Section 5.1.2(a) are issued to Ascentage.

(c) For clarity, [***].

(b) Section 5.1.3 is hereby amended in its entirety to read as follows:

5.1.3 [***]. Upon the [***], Unity shall the following number of shares of Unity common stock (in each case as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) based on how long after the Effective Date such [***]. In the case of Ascentage, such shares shall be issued within [***] ([***]) days of date that such [***] occurs. In the case of UM, such shares shall be issued within [***] ([***]) days after the shares are issued to Ascentage.

(a) If such [***] occurs within [***] ([***]) [***] of the Effective Date then (i) [***] ([***]) shares of common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) to Ascentage and (ii) [***] ([***]) shares of common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) to UM.

(b) If such [***] occurs more than [***] ([***]) [***] after the Effective Date but less than [***] ([***]) [***] after the Effective Date (i) [***] ([***]) shares of common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) to Ascentage, and (ii) [***] ([***]) shares of common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) to UM.

(c) If such [***] occurs more than [***] ([***]) [***] after the Effective Date (i) [***] ([***]) shares to Ascentage and (ii) [***] ([***]) shares to UM (in each case, as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) .

3. Equity Cap. The Parties further agree that Section 5.1.4 is hereby amended in its entirety to read as follows:

5.1.4 Equity Cap. Notwithstanding anything in the contrary in this Agreement, the Library Agreement or any Compound License Agreement(s), the maximum cumulative aggregate number of shares of Unity common stock that Ascentage and UM are collectively eligible to receive under Sections 6.1 and 6.2 of the Library Agreement, Section 5.1 of any Compound License Agreement(s) and this Section 5.1 is:

(a) [***] ([***]) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date) if only one Licensed Product is developed; and

(b) Three Million Nine Hundred Thirty-Three Thousand Three Hundred and Fifty (3,933,350) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date) if two or more Licensed Products is developed.

4. Miscellaneous. This Amendment shall inure to the benefit of and be binding upon the parties and their respective heirs, successors, trustees, transferees and assigns. In the event of a conflict between the provisions of this Amendment and the provisions of the Library Agreement, the provisions of this Amendment shall control. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their authorized representatives and delivered in duplicate originals as of the Amendment Effective Date.

ASCENTAGE PHARMA GROUP CORP. LTD.

By:/s/ Dajun Yang

Name: Dajun Yang, MD, PhD

Title: Chief Executive Officer

UNITY BIOTECHNOLOGY, INC.

By: /s/ Keith Leonard

Name: Keith Leonard

Title: Chief Executive Officer

Acknowledged By:

THE REGENTS OF THE UNIVERITY OF MICHIGAN

/s/ Kelley B. Sexton

Name: Kelley B. Sexton, Ph.D.

Title: Associate Vice President for Research, Technology Transfer and Innovation

Exhibit A

Upfront Equity Payments

	Upfront Equity Payments (# shares)		
	Total	**Ascentage 80%**	**Michigan 20%**
Library Agreement	393,335	314,668	78,667
1252 License Agreement	1,573,340	1,258,672	314,668
Totals	1,966,675	1,573,340	393,335

Exhibit 10.18

FIRST AMENDMENT TO COMPOUND LIBRARY AND OPTION AGREEMENT

This Amendment (the "Amendment"), dated as of March 28, 2018 (the Amendment Effective Date") is made by and between Ascentage Pharma Group Corp. Ltd., a Hong Kong corporation ("Ascentage"), with a business address at 11/F, AXA CENTRE, Gloucester Road, Wanchai, Hong Kong, and Unity Biotechnology, Inc., a Delaware corporation ("Unity"), with a business address at 3280 Bayshore Blvd, Suite 100, Brisbane, California 95002. Ascentage and Unity are sometimes referred to herein as individually as a "Party" and collectively as the "Parties".

BACKGROUND

A. The Parties entered into a Compound Library and Option Agreement (the "Library Agreement") dated February 2, 2016 (the "Original Effective Date"), which granted Unity the right to screen Ascentage's collection of BCL-2/BCL-xL inhibitor compounds as well as additional BCL-2/BCL-xL inhibitor compounds discovered by Ascentage during the term of the Library Agreement, including pursuant to that certain Research Services Agreement between the Parties dated February 2, 2016 (collectively, the "BCL Compounds") to identify compounds with potential utility in the treatment of age-related conditions other than Oncology Indications. Defined terms used herein and not otherwise defined shall have the meanings ascribed in the Library Agreement.

B. On the Original Effective Date the Parties also entered that certain APG1252 License Agreement (the "1252 License Agreement") pursuant to which Ascentage granted Unity exclusive rights to a BCL Compound known as APG-1252 for the prophylaxis and treatment of, and palliation of symptoms associated with, age related indications other than Oncology Indications.

C. Ascentage is also a party to a License Agreement with the Regents of the University of Michigan ("Michigan") dated December 1, 2010 (as amended on May 30, 2013, February 2, 2016, May 10, 2017 and June 1, 2017, the "Michigan License Agreement"), pursuant to which Michigan granted Ascentage exclusive rights, with the right to sublicense, under certain Michigan patents which cover, among other things, the BCL Compounds.

D. The Michigan License Agreement provides for Ascentage to pay Michigan twenty percent (20%) of Ascentage's Gross Sublicensing Revenues (as defined therein) and further provides that in the event a portion of Gross Sublicensing Revenues includes non-cash consideration, the relevant Ascentage sublicensee shall be required to issue such non-cash consideration directly to Michigan.

E. Each of the Library Agreement and the 1252 License Agreement provided for certain payments to be made by Unity to Ascentage in the form of shares of Unity common stock including (i) in each case, an upfront payment that was due within [***] ([***]) days of the Original Effective Date (the "Upfront Equity Payments"), and (ii) in the case of the Library Agreement, additional payments upon Unity's designation of each of the first two locally-dosed Development Candidates (the "DC Nomination Equity Payments" and, together with the Upfront Equity Payments, the "Unity Equity Payments")

F. Pursuant to the terms of the Michigan License Agreement (i) twenty percent (20%) of each Unity Equity Payment is owed by Ascentage to Michigan as a sublicense fee, and (ii) Ascentage is required to cause Unity to issue such Unity Equity Payments directly to Michigan.

G. On or around the Original Effective Date, in order to enable Ascentage to satisfy its sublicense fee payment obligations to Michigan with respect to the Upfront Equity Payments, the Parties

agreed that Unity should issue twenty percent (20%) of the Upfront Equity Payments directly to Michigan. Therefore, Unity bifurcated its issuance of the Upfront Equity Payments and issued eighty percent (80%) of the shares of common stock to Ascentage and twenty percent (20%) portion of the shares of common stock to Michigan. A schedule of the Upfront Equity Payments that were due and made to each party is set forth on Exhibit A hereto.

H. The Parties now wish to set forth and document their understanding and agreement about the manner in which the Upfront Equity Payments were made as well as the manner in which any additional DC Nomination Payments will be made in connection under the Library Agreement. Except as expressly modified hereby, the Library Agreement shall continue in full force according to its terms.

NOW, THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, it is agreed by and between the Parties as follows:

AGREEMENT

1. Upfront Equity Payments.

(a) On February 17, 2016, pursuant to Restricted Stock Grant Agreement, Unity granted Ascentage a total of 1,573,340 shares of Unity common stock, of which 314,668 shares represented Ascentage's eighty percent (80%) portion of the Upfront Equity Payment due under the Library Agreement.

(b) On February 17, 2016, pursuant to a separate Restricted Stock Grant Agreement, Unity granted Michigan a total 393,335 shares of Unity common stock, of which 78,667 shares represented Michigan's twenty percent (20%) portion of the Upfront Equity Payment due under the Library Agreement.

(c) Ascentage acknowledges and agrees that (i) the Upfront Equity Payment to Michigan described in Section 1(b) above was made by Unity on behalf of Ascentage in order to satisfy Ascentage's obligation to make sublicense fee payments to Michigan under the Michigan License Agreement, (ii) that the Upfront Equity Payment to Ascentage described in Section 1(a) represented the full balance of the Upfront Equity Payments owed to Ascentage, and (iii) therefore Unity has fully and completely satisfied and discharged its obligation to make the Upfront Equity Payment due under the Library Agreement.

2. DC Nomination Equity Payments. To address the fact that Unity will be required to issue twenty percent (20%) of each DC Nomination Equity Payment directly to Michigan to satisfy Ascentage's sublicense fee payment obligation to Michigan under the Michigan License Agreement, the Parties hereby agree to amend Section 6.2 of the Library Agreement in its entirety to read as follows:

> 6.2 *First Locally-Dosed Licensed Compounds. Upon Unity's designation of each of the first two (2) locally-dosed Development Candidates, Unity shall make the following issuances of its common stock (in each case as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance):*
>
> > *6.2.1 Unity shall issue to Ascentage Three Hundred Fourteen Thousand Six Hundred Sixty-Eight (314,668) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance), for each locally dosed Development Candidate; such shares to be issued to Ascentage pursuant to the Stock Agreement within [***] ([***]) days of date a Compound License Agreement is executed with respect to such Development Candidate.*

6.2.2 Unity shall issue to UM Seventy-Eight Thousand Six Hundred Sixty-Seven (78,667) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance), for each locally dosed Development Candidate; such shares to be issued to Michigan within [***] ([***]) days after the date the shares described in Section 6.2.1 are issued to Ascentage.

3. Equity Cap. The Parties further agree that Section 6.3 is hereby amended in its entirety to read as follows:

6.3 Equity Cap. Notwithstanding anything in the contrary in this Agreement, any Compound License Agreement or the APG-1252 License Agreement, the maximum cumulative aggregate number of shares of Unity common stock that Ascentage and UM are collectively eligible to receive under Sections 6.1 and 6.2 of this Agreement, Section 5.1 of all Compound License Agreements and Section 5.1 of the APG-1252 License Agreement is:

(a) [***] ([***]) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) if only one Licensed Product is developed; and

(b) Three Million Nine Hundred Thirty-Three Thousand Three Hundred and Fifty (3,933,350) shares of Unity common stock (as adjusted for stock splits, reverse stock splits, stock dividends, recapitalizations and the like occurring after the Original Effective Date and prior to issuance) if two or more Licensed Products is developed.

4. Miscellaneous. This Amendment shall inure to the benefit of and be binding upon the parties and their respective heirs, successors, trustees, transferees and assigns. In the event of a conflict between the provisions of this Amendment and the provisions of the Library Agreement, the provisions of this Amendment shall control. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Remainder of page left blank intentionally]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their authorized representatives and delivered in duplicate originals as of the Amendment Effective Date.

ASCENTAGE PHARMA GROUP CORP. LTD.

By:/s/ Dajun Yang

Name: Dajun Yang, MD, PhD

Title: Chief Executive Officer

UNITY BIOTECHNOLOGY, INC.

By: /s/ Keith Leonard

Name: Keith Leonard

Title: Chief Executive Officer

Acknowledged By:

THE REGENTS OF THE UNIVERITY OF MICHIGAN

/s/ Kelley B. Sexton

Name: Kelley B. Sexton, Ph.D.

Title: Associate Vice President for Research, Technology Transfer and Innovation

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit A

Upfront Equity Payments

	Upfront Equity Payments (# shares)		
	Total	**Ascentage 80%**	**Michigan 20%**
Library Agreement	393,335	314,668	78,667
1252 License Agreement	1,573,340	1,258,672	314,668
Totals	1,966,675	1,573,340	393,335

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXCLUSIVE LICENSE AGREEMENT

This License Agreement ("Agreement") is made as is made as of the 28th day of June, 2013 (the "Effective Date") by and between the Mayo Foundation for Medical Education and Research, having its principal place of business at 200 First Street SW, Rochester, MN 55905("Mayo"), and Cenexys, Inc., a Delaware corporation, having a place of business at 1700 Owens St., Suite 535, San Francisco, CA 94158 ("Company").

BACKGROUND

A. Mayo owns certain Patent Rights and Know-How (each as defined below);

B. Company desires to obtain a license from Mayo to the Patent Rights and Know-How, all on the terms and conditions set forth below; and

C. Company and Mayo further intend to enter into a Research Agreement pursuant to which Company will fund certain research conducted in the laboratories of Drs. Jan Van Deursen and James Kirkland at Mayo (the "Research Agreement").

D. Company similarly intends to enter into a research agreement with the Buck Institute for Research on Aging ("Buck Institute") pursuant to which Company will fund certain research conducted in the laboratories of Dr. Judy Campisi (“Buck Research Agreement”) in exchange for the right to license any resulting inventions and certain additional inventions of Buck Institute that exist as of the Effective Date ("Buck Inventions") under a license agreement to be entered into by Company and Buck Institute ("Buck License Agreement").

NOW, THEREFORE, in consideration of the mutual covenants and promises herein contained, the parties hereto agree as follows:

ARTICLE 1
DEFINITIONS

As used in this Agreement, the following capitalized terms shall have the meanings indicated:

1.1 "Additional Inventions" shall mean discoveries and inventions that (i) are necessary or useful for the development, manufacture or commercialization of Licensed Products within the Field, and (ii) are developed in the laboratories of Drs. Jan Van Deursen, James Kirkland and/or Darren Baker at Mayo during the IP Capture Period, excluding inventions generated pursuant to the Research Agreement and subject to the terms thereof.

1.2 "Affiliate" shall mean any entity which controls, is controlled by or is under common control with Company. An entity shall be regarded as in control of another entity for

purposes of this definition if it owns or controls more than fifty percent (50%) of the shares of the subject entity entitled to vote in the election of directors (or, in the case of an entity that is not a corporation, for the election of the corresponding managing authority). For Mayo, “Affiliate” shall mean any corporation or other entity within the same “controlled group of corporations” as Mayo or its parent Mayo Clinic. For purposes of this definition, the term “controlled group of corporations” will have the same definition as Section 1563 of the Internal Revenue Code as of November 10, 1998, but will include corporations or other entities which if not a stock corporation, more than fifty percent (50%) of the board of directors or other governing body of such corporation or other entity is controlled by a corporation within the controlled group of corporations of Mayo or Mayo Clinic. Mayo’s Affiliates include, but are not limited to: Mayo Clinic; Mayo Collaborative Services, Inc.; Mayo Clinic - Methodist Hospital; Mayo Clinic - Saint Marys Hospital; Mayo Clinic Florida; Mayo Clinic Arizona; and its Mayo Clinic Health System entities.

1.3 "Buck Know-how" shall mean unpatented technical information, know-how, processes, procedures, compositions, devices, methods, techniques, data or other subject matter that is licensed to Company under the Buck License Agreement.

1.4 "Buck Know-how Product" shall mean a product, composition or material for use in the Field that (a) incorporates Buck Know-How or whose discovery or development was enabled by Company’s use of Buck Know-How and (b) is not a Buck Patent Product.

1.5 “Buck Licensed Product” shall mean a Buck Patent Product or Buck Know-How Product.

1.6 "Buck Patent Rights" shall mean patent and patent applications exclusively licensed to Company under the Buck License Agreement.

1.7 "Buck Patent Product" shall mean a product, composition, or material for use in the Field (i) the manufacture, sale or use of which would but for the license granted herein, infringe a Valid Claim of the Buck Patent Rights, or (ii) whose discovery or development was enabled by Company’s use of a Buck Proprietary Research Tool (“Buck Tool Products”)

1.8 "Buck Proprietary Research Tool" shall mean a Research Tool that has been designated as a Proprietary Research Tool under the Buck License Agreement and exclusively licensed to Company.

1.9 "Buck Proprietary Research Tool Patent" Buck Patent Rights claiming the Buck Proprietary Research Tools.

1.10 "Field" shall mean the (a) prophylaxis , treatment, modulation or palliation of diseases or conditions through (i) the clearance or killing of senescent cells, or (ii) the inhibition or modulation of the deleterious effects of senescent cells, and (b) the prediction, diagnosis, monitoring and tracking of diseases or conditions being prevented, treated, modulated or inhibited pursuant to subsection (a) above.

1.11 "IP Capture Period" shall mean the period commencing on [***] and continuing until [***].

1.12 "Know-How" shall mean unpatented technical information, know-how, processes, procedures, compositions, devices, methods, techniques, data or other subject matter that is owned or controlled by Mayo that is useful for the discovery, development or commercialization of Licensed Products.

1.13 "Know-How Product" shall mean a product, composition or material for use in the Field that (a) incorporates Know-How or whose discovery or development was enabled by Company's use of Know-How and (b) is not a Patent Product.

1.14 "Licensed Product" shall mean a Patent Product or Know-How Product.

1.15 "Licensed Subject Matter" shall mean the Patent Rights and the Know-How.

1.16 "Net Sales" shall mean the total amount invoiced to third parties on sales of Licensed Products by Company, its Affiliates, or Sublicensees, for which royalties are due under Article 3 below, less the following reasonable and customary deductions actually given: (i) all trade, cash and quantity credits, discounts, refunds or government rebates; (ii) amounts for claims, allowances or credits for returns, retroactive price reductions, or chargebacks; (iii) packaging, handling fees and prepaid freight, sales taxes, duties and other governmental charges (including value added tax) shown on the face of the invoice; and (iv) provisions for uncollectible accounts determined in accordance with US GAAP, consistently applied to all products of the selling party, provided that in no event shall deductions for uncollectible accounts in any annual period exceed [***] percent ([***]%) of the cumulative Net Sales in such annual period. In the event that Company and a third party enter into a barter transaction pursuant to which Company transfers Licensed Products to such third party in exchange for non-cash consideration provided in lieu of cash, then Net Sales shall be calculated based on the value of the non-cash consideration received, provided that in no event shall the transferred Licensed Products be valued at more than the then-current customary sales price for such Licensed Products invoiced to third parties or fair market value if there are no current invoices to third parties. For the removal of doubt, Net Sales shall not include sales by Company to its Affiliates for resale, provided that if Company transfers Licensed Products to an Affiliate, and the Affiliate retransfers the Licensed Products to third-party purchaser, then Net Sales shall be the price charged by the Affiliate to third-party purchaser, less documented allowable deductions.

In the event that Company grants a sublicense hereunder, and receives payments based upon the Sublicensee's sales of Licensed Products, Company may upon receiving consent from Mayo, which consent shall not be unreasonably withheld, substitute the definition of "Net Sales," used by the Sublicensee to calculate payments to Company in place of the foregoing definition of "Net Sales" for purposes of calculating royalties payable to Mayo on such Sublicensee's sales.

1.17 "Net Sublicensing Income" shall mean cash income (or any other consideration received in lieu of a cash payment, including, without limitation, securities, materials and equipment) received from a Sublicensee in consideration of the grant to such Sublicensee of a sublicense under the Patent Rights, but excluding earned royalties and any other share of net sales (including revenue sharing and profit payments that would otherwise be reflected in net sales) for the sale or distribution of Licensed Products. Net Sublicensing Income shall include without limitation any license signing fee, license maintenance fee, or milestone payment, and

any consideration received for an investment in equity (and conditional equity, such as warrants, convertible debt) of Company to the extent such consideration exceeds the fair market value of such equity or other conditional equity. Not included in the definition of Net Sublicensing Income is income received by Company (a) as *bona fide* loans; (b) from equity investments (and conditional equity, such as warrants, convertible debt) in Company at market value; (c) as reimbursements for actual documented patent prosecution costs and patent maintenance expenses; (d) as payment or reimbursement for research and development and/or other services conducted by or for Company, including costs of materials, equipment, manufacturing services or clinical testing, e.g., provided on the basis of full-time equivalent ("FTE") efforts of personnel at or below commercially reasonable and standard FTE rates ("FTE Reimbursements") and/or the reimbursement of out-of-pocket expenses; and (g) income to Company from a Sublicensee for commercial manufacturing of goods if such goods are intended for resale to third parties and the revenue derived from sales of such goods will be treated as Net Sales and subject to an earned royalty due to Mayo. In addition, Company shall have the right to deduct from Net Sublicensing Income (i) withholding taxes and other taxes, duties and similar amounts owing with respect to payments included within Net Sublicensing Income, but excluding what are commonly referred to as income taxes, and (ii) Eligible Expenses. As used herein, "Eligible Expenses" means (A) the documented costs and expenses reasonably incurred by Company in performing responsibilities with respect to Licensed Products specifically in connection with a sublicense to the Patent Rights with a Sublicensee, including FTE Reimbursements and out of pocket costs, or in performing research, development, and/or manufacture of Licensed Products in connection with such sublicense; and (B) a reasonable reserve for the costs and expenses that the Company has agreed to incur in a sublicense, but has not yet incurred, in the performance of its responsibilities under such agreement with a Sublicensee ("Future Expenses"), provided that any estimated costs are clearly identified by Company and are accompanied by supporting documentation.

1.18 "Patent Product" shall mean a product , composition, or material for use in the Field (i) the manufacture, sale or use of which would but for the license granted herein, infringe a Valid Claim of the Patent Rights, or (ii) whose discovery or development was enabled by Company's use of a Proprietary Research Tool ("Tool Products").

1.19 "Patent Rights" shall mean any and all rights in and to:

(a) all worldwide patent and patent applications claiming or disclosing subject matter claimed or disclosed in the patent(s) and patent application(s) listed in Exhibit A hereto as of the Effective Date (the "Existing Patents");

(b) all patents and patent applications claiming inventions developed pursuant to Research Agreement for which the Company exercises its option thereunder ("Research Agreement Patents");

(c) all patents and patent applications claiming Additional Inventions with respect to which Company exercised its option pursuant to Section 2.2 ("Additional Invention Patents"); and

(d) all divisions, continuations, continuations-in-part (but only for subject matter supported pursuant to 35 U.S.C. §112 by the foregoing) and substitutions of any of the patent applications in (a)-(c) above, all patents issuing thereon, and all registrations, reissues, reexaminations or extensions of any kind with respect to any of the foregoing patents or their foreign counterparts.

In the event that Mayo jointly owns an invention with the Company or a third party who works with the Company in the Field by reason of the fact that personnel of Mayo, Company and/or such third party are joint inventors of such invention, it is understood that the Patent Rights include only Mayo's rights as a joint owner of the patent applications and patents that claim such joint invention.

1.20 "Permitted Third Party Funding Source" shall mean any non-profit or not-for-profit funding source that provides funding to the laboratories of Drs. Jan Van Deursen, James Kirkland and/or Darren Baker.

1.21 "Proprietary Research Tool" shall mean a Research Tools(a) existing as of the Effective Date and listed on Exhibit C, and (b) any future Research Tool used to discover or develop Patent Products and which Company elects to designate as a Proprietary Research Tool pursuant to Section 2.4.

1.22 "Proprietary Research Tool Patents" shall mean the Patent Rights claiming the Proprietary Research Tools. A list of the Proprietary Research Tool Patents existing as of the Effective Date and organized by the Proprietary Research Tool which they cover, is attached hereto as Exhibit C.

1.23 "Research Tool" means animal models, cell lines, monoclonal antibodies, research assays and reagents, cloning tools, and similar materials whose primary utility is in the conduct of basic scientific research.

1.24 "Research Tool Patent Claim" shall mean a claim of a Research Agreement Patent or Additional Invention Patent that claims a Research Tool that has not been designated as Proprietary Research Tool by Company pursuant to Section 2.4.

1.25 "Sublicensee" shall mean any non-Affiliate third party to whom Company has granted the right to manufacture and sell Licensed Products, with respect to Licensed Products made and sold by such third party.

1.26 "Valid Claim" shall mean a claim of (a) an issued and unexpired patent which has not been held unpatentable, invalid or unenforceable by a court or other government agency of competent jurisdiction and has not been admitted to be invalid or unenforceable through reissue, re-examination, disclaimer or otherwise; provided, however, that if the holding of such court or agency is later reversed by a court or agency with overriding authority, the claim shall be reinstated as a Valid Claim with respect to Net Sales made after the date of such reversal, and (b) a claim of a pending patent application which has not been abandoned or finally rejected without the possibility of appeal or re-filing and has been pending for less than thirteen (13) years from the filing date from which such claim takes priority, provided that in the event that a pending claim which has ceased to be a deemed a Valid Claim because it has been pending for more than

thirteen (13) years eventually issues, Company shall reimburse to Mayo for all back royalties (i.e., all royalties that would have been due during the period commencing on the date such pending claim ceased to be considered a Valid Claim and the date on which it eventually issued), plus interest on such back royalties at the rate described in Section 3.13.

ARTICLE 2
LICENSE

2.1 Grant. Subject to the terms of the Agreement, Mayo hereby grants to Company a worldwide: (i) exclusive license to all of Mayo's interest in the Patent Rights (excluding the Research Tool Patent Claims) and the Proprietary Research Tools to develop, make, use, sell, offer for sale, import, export or otherwise distribute Licensed Products, and (ii) nonexclusive license under the Research Tool Patent Claims and Know-How to develop, make, use, sell, offer for sale, import, export or otherwise distribute Licensed Products, and to have any of the foregoing performed on its behalf by a third party. Notwithstanding any provisions in this Agreement, all rights granted in and to Additional Inventions under this Agreement will be subject to any and all obligations that Mayo may have to Permitted Third Party Funding Sources

2.2 Option to Additional Inventions.

(a) Subject to the terms of this Agreement, Company shall have an option to include within the license granted to Company under Section 2.1 above, all worldwide patent rights owned or controlled by Mayo with respect to Additional Inventions.

(b) Mayo shall notify Company promptly in writing of all Additional Inventions and shall provide Company with a suitable description and other information reasonably requested by Company for the purpose of evaluating such Additional Inventions for purposes of its option (such notice and accompanying information, an "Invention Disclosure").

(c) To exercise its option with respect to a particular Additional Invention, Company shall so notify Mayo within ninety (90) days after receiving from Mayo a reasonably complete Invention Disclosure for such invention. Following such exercise, all patent applications and/or patents owned or controlled by Mayo directed to such invention shall be deemed included within the Patent Rights.

2.3 Sublicenses. Company may grant and authorize sublicenses within the scope of the license granted to Company pursuant to this Agreement. Each such sublicense shall include provisions: (a) substantially identical to Sections 2.5, 2.6 and 13.11 and Articles 10 and 11 with the Sublicensee in place of Company and (b) that are not inconsistent with any terms herein.

2.4 Designation of Additional Proprietary Research Tools.

(a) Companyshall have the right upon written notice to Mayo to designate any Additional Invention that is a Research Tool or any Research Tool arising under the Research Agreement as a Proprietary Research Tool, in which case all patents and patent applications owned or controlled by Mayo and directed to such Research Tool shall thereafter be deemed

Proprietary Research Tool Patents and such Research Tool, together with all patents and patent applications directed thereto, shall be exclusively licensed to Company.

(b) To exercise its option to designate a particular Research Tool as a Proprietary Research Tool, Company shall provide Mayo with written notice of such election at the time it exercises its option under the Research Agreement or Section 2.2 above, as applicable, to include such Research Tool within the licenses granted to Company under Section 2.1 above.

2.5 Retained Rights. Mayo hereby retains a non-exclusive, non-transferrable right under the Licensed Subject Matter for its own clinical (including Mayo's reference laboratory), educational and non-commercial research programs.

2.6 Governmental Rights. All rights herein are subject to the rights and obligations to and requirements of the U.S. government, if any have arisen or may arise, regarding the Patent Rights, including as set forth in 35 U.S.C. §§200 et al., 37 C.F.R. Part 401 et al. ("Bayh-Dole Act"). Company and Mayo each agree to comply with the provisions of the Bayh-Dole Act as relevant to the Patent Rights, including in the case of Mayo, promptly reporting to the U.S. government all subject inventions and taking all actions necessary to take title to the Patent Rights, and in the case of Company, promptly providing to Mayo with information reasonably requested by Mayo that is necessary to enable Mayo to meet its compliance requirements under the Bayh-Dole Act.

2.7 No Implied Licenses. Nothing herein shall be construed as granting Company, by implication, estoppel or otherwise, any license or other right to any intellectual property of Mayo other than the Licensed Subject Matter or to grant to Company any right or license other than those expressly granted herein.

ARTICLE 3
PAYMENTS, FUNDING OBLIGATIONS AND REPORTS

3.1 Equity. In consideration for the rights and licenses granted by Mayo to Company herein and the research development support agreed to by Mayo under Section 3.11, Company shall, within thirty (30) days of the Effective Date and subject to Mayo's execution and delivery to Company of a Stock Issuance Agreement in substantially the form attached hereto as Exhibit B, issue to Mayo Two Million (2,000,000) shares of Company's common stock.

3.2 Minimum Annual Royalty Payments. As further consideration for the rights and licenses granted by Mayo to Company herein Company shall pay to Mayo an annual minimum royalty of [***] U.S. Dollars ($[***]). The first annual minimum royalty payment shall be due within thirty (30) days of the fourth anniversary of the Effective Date with subsequent annual minimum royalty payments being due within thirty (30) days of each subsequent anniversary of the Effective Date until the expiration (or if applicable, the earlier termination) of this Agreement. Annual minimum royalty payments shall be non-refundable but shall be creditable against milestones owed under Section 3.3, running royalties accrued under Section 3.5 and/or sublicensing fees owed under Section 3.7, in each case during the one year period following the date on which such annual minimum royalty payment was paid.

3.3 Development Milestone Payments.

(a) In consideration for the rights and licenses granted by Mayo to Company herein, Company agrees to pay Mayo following payments upon the occurrence of each milestone specified below:

Development Milestone Event	Development Milestone Payment
1.Commencement of a Phase I Clinical Study for a Licensed Product or a Buck Licensed Product	$[***]
2.Commencement of a Phase II Clinical Study for a Licensed Product or a Buck Licensed Product	$[***]
3. Commencement of a Phase III Clinical Study for a Licensed Product or a Buck Licensed Product	$[***]
4.Acceptance of filing of an MAA by the FDA, EMA or MHLW for a Licensed Product or a Buck Licensed Product	$[***]

(b) Development milestones 1 to 3 shall be payable once each for the first two products (Licensed Products or Buck Licensed Products) to achieve the applicable milestone event. Milestone 4 shall be payable up to six times (i.e., once per MAA filed and accepted for review by the Regulatory Authority), for an aggregate of up to six (6) payments total. For clarity, Company's total payment obligations under this Section 3.3 shall in no event exceed [***] U.S. Dollars ($[***]) (i.e. up to an aggregate total of $[***] under milestones 1to 3 and up to an aggregate total of $[***] under milestone 4).

(c) As used in this Section 3.3, the following terms shall have the following meanings:

(i) "**EMA**" means the European Medicines Agency or any successor agency thereto;

(ii) "**FDA**" means the United States Food and Drug Administration or any successor agency thereto;

(iii) "**Phase I Clinical Study**" means any study in humans the principal purpose of which is preliminary determination of safety in healthy individuals or patients as described under 21 C.F.R. §312.21(a) with respect to the United States, or, with respect to a jurisdiction other than the United States, a similar clinical study, in each case which shall be deemed commenced when the third participant in such study has received his or her initial dose of such Licensed Product or Buck Licensed Product;

(iv) "**Phase II Clinical Study**" means a preliminary efficacy and dose ranging human clinical study of a License Product in the target patient population, as described under 21 C.F.R. §312.21(b) with respect to the United States, or, with respect to a jurisdiction other than the United States, a similar clinical study, in each case which shall be deemed

commenced when the third patient in such study has received his or her initial dose of such Licensed Product or Buck Licensed Product;

(v) "**Phase III Clinical Study**" means a human clinical study designed as a pivotal study to confirm with statistical significance the efficacy and safety of a Licensed Product or Buck Licensed Product with respect to a given indication, which study is performed for purposes of filing an MAA for such Product for such indication as described under 21 C.F.R. §312.21(c) with respect to the United States, or, with respect to a jurisdiction other than the United States, a similar clinical study, in each case which shall be deemed commenced when the third patient in such study has received his or her initial dose of such Licensed Product or Buck Licensed Product; and

(vi) "**MAA**" (Marketing Approval Application) shall mean a new drug application filed with the FDA as more fully defined in 21 C.F.R. §314.50 et. seq., or similar application or submission filed with or submitted to any Regulatory Authority to obtain permission to initiate marketing and sales of a Licensed Product or Buck Licensed Product for a particular indication. An MAA shall be deemed to be "accepted" if it has been accepted for substantive review by the FDA or other applicable Regulatory Authority;

(vii) "**MHLW**" means Japan's Ministry of Health, Labor and Welfare (also known as "Korosho") or any successor agency thereto.

(viii) "**Regulatory Authority**" means a federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the discovery, development, commercialization or other use or exploitation (including review and approval of MAAs) of pharmaceutical products in any jurisdiction, including the FDA, EMA, and the MHLW.

(d) Company agrees to promptly notify Mayo in writing of the occurrence of each of the foregoing milestones and the payment for such milestone shall be due within thirty (30) days of occurrence thereof.

3.4 Sales Milestones. In further consideration of the exclusive rights granted herein, Company shall pay Mayo the following milestone payments upon achievement of the corresponding sales milestones:

(a) Upon first achieving aggregate Net Sales of a Licensed Product or Buck Licensed Product equal to or exceeding [***] U.S. Dollars ($[***]), Company shall pay Mayo [***] U.S. Dollars ($[***]);

(b) Upon first achieving aggregate Net Sales of a Licensed Product or Buck Licensed Product equal to or exceeding [***] U.S. Dollars ($[***]), Company shall pay Mayo [***] U.S. Dollars ($[***]);

(c) Upon first achieving aggregate Net Sales of a Licensed Product or Buck Licensed Product equal to or exceeding [***] U.S. Dollars ($[***]), Company shall pay Mayo [***] U.S. Dollars ($[***]);

(d) Upon first achieving aggregate Net Sales of a Licensed Product or Buck Licensed Product equal to or exceeding [***] U.S. Dollars ($[***]), Company shall pay Mayo [***] U.S. Dollars ($[***]).

The foregoing sales milestones shall be payable once for each of the first two products (Licensed Products or Buck Licensed Products) to achieve the applicable sales thresholds. For clarity, Company's total payment obligations under this Section 3.4 shall in no event exceed [***] U.S. Dollars ($[***]). Company agrees to promptly notify Mayo in writing of the occurrence of each of the foregoing milestones and the payment for such milestone shall be included with the royalty payment due for the calendar quarter in which such sales milestone was achieved.

3.5 Earned Royalty. As additional consideration of the rights and licenses granted by Mayo to Company herein, except as otherwise provided in this Article 3, Company agrees to pay to Mayo as running royalties a percentage of Net Sales from Licensed Products and Buck Licensed Products sold by Company, its Affiliates and Sublicensees as follows:

(a) [***]% of (i) annual Net Sales of Know-How Products and (ii) of annual net sales of Buck Know-How Products;

(b) For Patent Products and Buck Patent Products for which there are no Valid Claims within the Patent Rights or Buck Patent Rights covering the composition of matter of the applicable Licensed Product or Buck Licensed Product:

Annual Net Sales of Licensed Product	Applicable Royalty Rate
Portion of worldwide annual Net Sales of such Patent Products and Buck Patent Products less than or equal to [***] Dollars (US$[***])	[***] %
Portion of worldwide annual Net Sales of such Patent Products and Buck Patent Products over [***] Dollars (US$[***])	[***]%

(c) For Patent Products and Buck Patent Products for which there is at least one Valid Claim within the Patent Rights covering the composition of matter of the applicable Patent Product or Buck Patent Product:

Annual Net Sales of Licensed Product	Applicable Royalty Rate
Portion of worldwide annual Net Sales of such Patent Products and Buck Patent Products less than or equal to [***] Dollars (US$[***])	[***]%
Portion of worldwide annual Net Sales of such Patent Products and Buck Patent Products over [***] Dollars (US$[***])	[***]%

Licensed Products or Buck Licensed Products transferred to Mayo or its Affiliates are not considered transfers for purposes of determining Net Sales or for calculating Earned Royalty. No Earned Royalty is due to Mayo on transfers to Mayo or its Affiliates.

3.6 Certain Additional Terms.

(a) Royalty Term.

(i) Mayo's right to receive royalties under Section 3.5(c) above shall expire on a product-by-product basis in a particular country upon the expiration of the last to expire Valid Claim in the Licensed Patents covering the composition of matter of such Licensed Product in such country (or in the case of the Buck Licensed Patents, upon the expiration of the last to expire Valid Claim in the Buck Licensed Patents covering the composition of matter of such Buck Licensed Product in such country).

(ii) Mayo's right to receive royalties under Section 3.5(b) above shall expire on a product-by-product basis in a particular country upon the expiration of the last to expire Valid Claim in the Licensed Patents covering such Licensed Product in such country (or in the case of the Buck Licensed Patents, upon the expiration of the last to expire Valid Claim in the Buck Licensed Patents covering such Buck Licensed Product in such country), provided that with respect to any Patent Product that is a Tool Product (or any Buck Patent Product that is a Tool Patent), Mayo shall be entitled to continue to receive a royalty under Section 3.5(b) with respect to worldwide sales of such Patent Product or Buck Patent Product until the expiration of the last to expire Valid Claim of the Tool Patent(s) covering the Proprietary Research Tool(s) (or until the expiration of the last to expire Valid Claim of the Buck Tool Patent(s) covering the Buck Proprietary Research Tool(s)), in each case whose use enabled the discovery or development of such Patent Product or Buck Patent Product.

(iii) Mayo's right to receive royalties under Section 3.5(a) above shall expire on earlier of (A) the thirteenth (13th) anniversary of the first commercial sale of the first Licensed Product or Buck Licensed Product by Company anywhere in the world, or (B) January 1, 2037.

(b) Single Royalty; Non-Royalty Sales. In the event that a Licensed Product or Buck Licensed Product would be subject to two or more of the royalty provisions in Sections 3.5 above (e.g., in the event a Licensed Product or Buck Licensed Product is covered by multiple Valid Claims, some of which are composition of matter claims and some of which are not), only a single royalty shall be paid to Mayo with respect to such Licensed Product or Buck Licensed Product, that royalty being the highest of the royalties applicable to such Licensed Product or Buck Licensed Product. It is understood that royalties under Section 3.5(c) shall only be payable with respect to Licensed Products or Buck Licensed Products whose sale would infringe a Valid Claim of the Licensed Patents or Buck Licensed Patents covering the composition of matter of such Licensed Product or Buck Licensed Product in the country for which such Licensed Product or Buck Licensed Product is sold. In no event shall more than one royalty be due hereunder with respect to any Licensed Product (or Buck Licensed Product) unit; nor shall a royalty be payable under this Article 3 with respect to sales of Licensed Products or Buck Licensed Products at cost for use in research and/or development, in clinical trials or as samples.

(c) Multiple Royalties. If Company, its Affiliate or Sublicensee is required to pay a non-Affiliate third party other than the Buck Institute for Research on Aging amounts with respect to a Licensed Product or Buck Licensed Product under agreements for patent rights or other technologies which Company, its Affiliate or Sublicensee, in its best judgment, determines are necessary to license or acquire with respect to such Licensed Product or Buck Licensed

Product, Company may deduct such amount owing to such non-Affiliate third parties (prior to any reductions) from the royalty owing to Mayo for the sale of such Licensed Product or Buck Licensed Product pursuant to Section 3.5 above. Notwithstanding the foregoing provisions of this Section 3.6, in no event shall the royalties due to Mayo pursuant to Section 3.5 above be so reduced to an amount less than:

(i) [***] percent ([***]%) of the amount that would otherwise be due to Mayo with respect to Licensed Products or Buck Licensed Product subject to Sections 3.5(a) or 3.5(b); or

(ii) [***] percent ([***]%) of the amount that would otherwise be due to Mayo with respect to Licensed Products or Buck Licensed Product subject to Section 3.5(c).

(d) Royalties on Buck Licensed Products. Notwithstanding anything to the contrary in this Agreement it is understood and agreed that any given Buck Licensed Product shall only be subject to milestone and royalty obligations under this Agreement if that product is subject to milestone and royalty obligations under the Buck License Agreement.

3.7 Sublicense Fees.

(a) Company shall pay to Mayo [***]% of the Net Sublicensing Income received by Company or its Affiliates

(b) Notwithstanding the foregoing:

(i) Company shall only be obligated to share [***]% of that portion of the Net Sublicensing Income that exceeds the then current aggregate amount spent by Company on the development of the Licensed Products included in such sublicense as of the date such Net Sublicensing Income was received; and

(ii) Company's total payment obligations under this Section 3.7 shall be capped at [***] U.S. Dollars ($[***]).

3.8 Records & Accounting. Company will throughout the Term, keep complete, true and accurate books of accounts and records of Net Sales sufficient to support and verify the calculation of all royalties and sales milestones due and payable to Mayo under this Agreement. Such books and records will be open at reasonable times, but not more frequently than once per calendar year, for inspection by a representative of Mayo, at Mayo's expense, for audit and verification of any report required under this Agreement with respect to Net Sales received not more than ten (10) years prior to the date of Mayo's request. Mayo representative will treat as confidential all relevant matters and will be a person or firm reasonably acceptable to Company. In the event such audit reveals an underpayment to Mayo, Company will within thirty (30) days pay the royalty due in excess of the royalty actually paid. In the event the audit reveals an underpayment by Company of more than [***] percent ([***]%) of the amount due, Company will pay interest on the royalty due in excess of the royalty actually paid in accordance with Section 3.13 below and will also pay all of Mayo's costs in conducting the audit. Notwithstanding the foregoing, in the event that it is demonstrated that Company has knowingly underpaid royalties owed to Mayo (other than royalties being withheld by Company in

connection with a dispute between the parties pre-dating the audit), Company will pay Mayo interest on the royalty due in excess of the royalty actually paid at the maximum interest rate allowed by law in the State of New York.

3.9 Reports. Beginning with the first accrual of Net Sales on which a royalty is due hereunder, Company shall provide to Mayo a quarterly royalty report as follows: Within ninety (90) days after the end of each calendar quarter, Company shall deliver to Mayo a true and accurate report, giving such particulars of the business conducted by Company, its Affiliates and Sublicensees, if any, during such calendar quarter as are pertinent to account for royalties due under this Article 3. Such report shall include at least (i) the total of Net Sales during such quarter; (ii) the calculation of royalties; and (iii) the total royalties so calculated and due to Mayo. Simultaneously with the delivery of each such report, Company shall pay to Mayo the total royalties, if any, due to Mayo for the period of such report. If no royalties are due, Company shall so report. Mayo shall not provide to non-Affiliate third parties any information contained in reports provided to Mayo under this Section 3.09, or learned by Mayo under Section 3.08 above.

3.10 Payments. All amounts payable hereunder by Company shall be payable in United States Dollars. If any currency conversion shall be required in connection with the payment of royalties hereunder, such conversion shall be made by using the exchange rates used by Company in calculating Company's own revenues for financial reporting purposes.

3.11 Research & Development Funding by Mayo. Subject to the terms and conditions of this Agreement, Mayo agrees to provide a total of up to [***] Dollars in two tranches of [***] Dollars ($[***]) each towards conducting research and development beneficial to and approved by the Sponsor, which Sponsor has agreed to use to fund research at Mayo. Sponsor shall be permitted to satisfy its payment obligation to Mayo through the use of a convertible promissory note (which note shall be convertible into Series A Preferred Stock of the Sponsor). Parties shall jointly develop the protocols of such research and development program.

3.12 Taxes. Company is responsible for all taxes, duties, import duties, assessments and other governmental charges, however designated, which are now or hereafter imposed by any authority on Company related to manufacture, use, sale or importation of the Licensed Product. Mayo shall be responsible for paying any and all taxes (other than withholding taxes or deduction of tax at source required by applicable law to be paid by Company) levied on it by account of its receipt of any payments it receives under this Agreement. If applicable laws require that taxes be withheld or deducted at source from any amounts due to Mayo under this Agreement, Company shall (a) deduct these taxes from the remittable amount, (b) pay the taxes to the proper taxing authority, and (c) deliver to Mayo a statement including the amount of tax withheld and justification therefor, and such other information as may be necessary for tax credit purposes. Company will obtain, or assist Mayo in obtaining, any tax reduction (including avoidance of double taxation), tax refund or tax exemption available to Mayo by treaty or otherwise.

3.13 Overdue Payments. If overdue, the payments due under this Agreement shall bear interest until paid at a per annum rate of [***] percent ([***]%) above the prime rate in effect at US Bank on the due date. The acceptance of any payment, including such interest, shall not

foreclose Mayo from exercising any other right or seeking any other remedy that it may have as a consequence of the failure of Company to make any payment when due.

ARTICLE 4
DATA ACCESS

Promptly after the Effective Date, Mayo shall, upon Company's request, provide to Company all data, reports, analyses and other information in its possession or control relating to the Licensed Products. Thereafter, upon request by Company, Mayo shall provide copies of all such additional materials as have been generated since the prior disclosure. Subject to the provisions of Article 6 below, Company will have the right to use all such data and materials for any purpose, and to provide the same to third parties under reasonable conditions of confidentiality or as Company considers appropriate in connection with obtaining regulatory approval to market and/or commercializing Licensed Products. In addition, as reasonably requested by Company from time to time, Mayo shall at Company's sole expense (reimbursing Mayo's costs to make and deliver such Proprietary Research Tools), deliver to Company reasonable quantities of Proprietary Research Tools based on availability. The Parties agree that any and all materials supplied to Company by Mayo shall be supplied under a material transfer agreement, the terms of which shall be substantially similar to the template material transfer agreement attached hereto as Exhibit D.

ARTICLE 5
DUE DILIGENCE

5.1 Obligation to Exploit. Company shall use commercially reasonable efforts to bring one or more Licensed Products to market and to meet the market demand therefor.

5.2 Reports. Within sixty (60) days following the end of each calendar year during the term of this Agreement, Company shall prepare and deliver to Mayo a written report which shall describe, in reasonable detail, the research performed during the previous year employing the Licensed Subject Matter, the progress of the development and exploitation of Licensed Subject Matter during the previous year and the names of all Sublicensees (if any), including which of the Sublicensees are Affiliates Subject to the parameters outlined in Section 3.8.

ARTICLE 6
CONFIDENTIALITY

6.1 Confidential Information. Except as provided herein, each party shall maintain in confidence, and shall not use for any purpose or disclose to any third party, non-public and proprietary information disclosed by the other party that (a) if in written, graphic, machine readable or other tangible form is marked "Confidential," "Proprietary" or in some other manner to indicate its confidential nature, and if disclosed in oral or other intangible form is designated as confidential at the time of its initial disclosure and is confirmed in writing as confidential within forty-five (45) days following such disclosure, or (b) that, given the nature of the information or the circumstances surrounding its disclosure, reasonably should be considered as

confidential (collectively, "Confidential Information"). Confidential Information shall not include any information that is: (i) already known to the receiving party at the time of disclosure hereunder, or (ii) now or hereafter becomes publicly known other than through acts or omissions of the receiving party, or (iii) is disclosed to the receiving party by a third party under no obligation of confidentiality to the disclosing party or (iv) independently developed by the receiving party without reliance on the Confidential Information of the disclosing party.

6.2 Permitted Usage. Notwithstanding the provisions of Section 6.1 above, the receiving party may use or disclose Confidential Information of the disclosing party to the extent necessary to exercise its rights hereunder (including commercialization and/or sublicensing of Licensed Subject Matter) or fulfill its obligations and/or duties hereunder and in filing for, prosecuting or maintaining any proprietary rights, prosecuting or defending litigation, complying with applicable governmental regulations and/or submitting information to tax or other governmental authorities; provided that if the receiving party is required by law to make any public disclosures of Confidential Information of the disclosing party, to the extent it may legally do so, it will give reasonable advance notice to the disclosing party of such disclosure and will use its reasonable efforts to secure confidential treatment of Confidential Information prior to its disclosure (whether through protective orders or otherwise). For clarity, to the extent it is reasonably necessary or appropriate to fulfill its obligations or exercise its rights under this Agreement, a party may disclose Confidential Information of the other to Sublicensees, consultants, and outside contractors on the condition that each such entity receiving such Confidential Information agrees to obligations of confidentiality and non-use at least as stringent as those therein.

ARTICLE 7
PATENTS AND INVENTIONS

7.1 Prosecution of Patent Rights. Company shall responsible for directing and controlling the filing, prosecution and maintenance of all Patent Rights. Company shall select the patent attorney, who is reasonably acceptable to Mayo. Mayo shall have full rights of consultation with the patent attorney so selected on all matters relating to Patent Rights. For purposes of this Article 7, "prosecution and maintenance" of patents and patent applications shall be deemed to include, without limitation, the conduct of interferences or oppositions, and/or requests for re-examinations, reissues or extensions of patent terms.

7.2 Patent Costs. Company acknowledges and agrees that the license granted hereunder is in partial consideration for Company's assumption of the costs of prosecution and maintenance of the Patent Rights as described herein. Company agrees to pay and shall pay for all expenses incurred in connection with the prosecution and maintenance of the Patent Rights. If Company fails to pay the expenses incurred pursuant to Section 7.1 with respect to one or patents or patent applications, Mayo may, at its sole discretion, terminate Company’s license with respect to such patent or patent applications, or with Company’s written consent, convert it into a non-exclusive license. If at any time Company determines that it no longer desires to pay the patent costs with respect to one or more patents or patent applications within the Patent Rights, Company shall give sixty (60) days advance written notice to Mayo. Upon such notice, Company’s license with respect to such patent or patent application shall terminate and

Company shall not be obligated to pay for any corresponding patent costs incurred after the end of such sixty (60) day period (but shall remain responsible for all patent costs incurred prior to and during such sixty (60) day period).

ARTICLE 8
TERM AND TERMINATION

8.1 Term. Unless terminated earlier pursuant to this Article 8, the term of this Agreement shall commence on the Effective Date and continue in full force and effect until the happening of the latter of: (1) the expiration, revocation or invalidation of the last issued Valid Claim within the Patent Rights or the abandonment or rejection of the last pending Valid Claim within the Patent Rights, whichever is later, or (2) the expiration of thirteen (13) years after first commercial sale of the first Licensed Product. Upon its natural expiration (and not upon earlier termination), the rights under the Agreement shall convert into a fully paid-up License that grants Company the right to continue selling Licensed Products.

8.2 Termination for Breach.

(a) In the event of a material breach of this Agreement, the non-breaching party shall be entitled to terminate this Agreement by written notice to the breaching party, if such breach is not cured within ninety (90) days after written notice is given by the nonbreaching party to the breaching party specifying the breach.

(b) Notwithstanding Section 8.2(a), in the event of a *bonafide* good faith dispute regarding whether in fact a breach has occurred (other than a dispute regarding an alleged breach by Company of Article 11 (Use of Names), which for clarity shall not be subject to the following), if the party alleged to be in breach of a material obligation or provision of this Agreement disputes such breach within the applicable ninety (90) day period, the parties shall submit the dispute to a single arbitrator from the American Arbitration Association ("AAA") for a preliminary, *non-binding* determination, within sixty (60) days of the submission of the matter to arbitration, as to whether it was more likely than not that a material obligation or provision of this Agreement was breached. Such arbitration shall be conducted in New York City in the State of New York pursuant to the commercial arbitration rules of the AAA, as modified by the procedures set forth in this Section8.2(b). The arbitrator shall be selected by mutual agreement of the parties; provided, however, that if the parties cannot agree on an arbitrator within five days of a party's request for a determination under this Section 8.2(b) as to whether a breach of a material obligation or provision of this Agreement has occurred, the arbitrator shall be selected by the AAA. If the arbitrator determines that it is more likely than not that the asserted breach was a breach of a material obligation or provision of this Agreement and the breaching party fails to cure such alleged breach within thirty (30) days after such determination, the non-breaching party may terminate this Agreement forthwith by written notice to the other party. If on the other hand, the arbitrator determines that it is more likely than not that the asserted breach was not a breach of a material obligation or provision of this Agreement, the non-breaching party shall not have the right to terminate this Agreement unless and until it has been finally determined by a court of competent jurisdiction that a material obligation or provision of this Agreement has been breached and the breaching party fails to cure such breach within thirty (30) days after such

determination. It is understood that a determination by the arbitrator in accordance with this Article 8.2(a) will not be binding on the parties as to whether the disputed activity was in fact a breach of a material obligation or provision of this Agreement and shall apply only to determine whether or not the cure period should be tolled as provided in this Article 8.2(a). In any case, a final determination of whether a breach of a material obligation or provision of this Agreement has occurred shall be determined only by a court of competent jurisdiction.

8.3 Termination by Company. Any provision herein notwithstanding, Company may terminate this Agreement, in its entirety or as to any particular patent or patent application within the Patent Rights, or as to any particular Licensed Product, at any time by giving Mayo at least sixty (60) days prior written notice. From and after the effective date of a termination under this Section 8.3 with respect to a particular patent or application, such patent(s) and patent application(s) in the particular country shall cease to be within the Patent Rights for all purposes of this Agreement, and all rights and obligations of Company with respect to such patent(s) and patent application(s) shall terminate. From and after the effective date of a termination under this Section 8.3 with respect to a particular Licensed Product, the license granted under Section 2.1 above shall terminate with respect to such Licensed Product, and the same shall cease to be a Licensed Product for all purposes of this Agreement. Upon a termination of this Agreement in its entirety under this Section 8.3, all rights and obligations of the parties shall terminate, except as provided in Section 8.4 below.

8.4 Survival.

(a) Termination of this Agreement for any reason shall not release either party hereto from any liability which at the time of such termination has already accrued to the other party.

(b) In the event this Agreement is terminated for any reason, Company shall provide Mayo with a written inventory of all Licensed Products that Company and its Affiliates have in process of manufacture, in use or in stock and Company and its Affiliates shall have the right to sell or otherwise dispose of such Licensed Products, all subject to the payment to Mayo royalties pursuant to Article 3 hereof.

(c) Upon termination of this Agreement by Mayo for any reason, any sublicense granted by Company hereunder shall survive, provided that upon request by Mayo, such Sublicensee promptly agrees in writing to be bound by the applicable terms of this Agreement.

(d) Articles 6 (Confidentiality), 10 (Indemnification and Insurance), 11 (Use of Names), Section 8.4 (Survival), 12.3 (Disclaimers) and 13.11 (Limitation of Liability) shall survive the expiration and any termination of this Agreement. Except as otherwise provided in this Article 8, all rights and obligations of the parties under this Agreement shall terminate upon the expiration or termination of this Agreement.

ARTICLE 9
INFRINGEMENT

9.1 Enforcement. If either party determines that a third party is making, using or selling a product that may infringe the Patent Rights, that party shall notify the other party in writing.

(a) Company shall have the first right (itself or through others), at its sole option, to bring suit to enforce the Patent Rights, and/or to defend any declaratory judgment action with respect thereto, in each case with respect to the manufacture, sale or use of a product within the Field; provided, however, that Company shall keep Mayo reasonably informed as to the defense and/or settlement of such action. Mayo shall have the right to participate in any such action with counsel of its own choice at its own expense. All recoveries received by Company from an action to enforce the Patent Rights shall be first applied to reimburse Company's and then Mayo's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringement of the Patent Rights, be divided [***] percent ([***]%) to Company and [***] percent ([***]%) to Mayo, provided that Mayo's portion shall not exceed the amount Mayo would have received as a royalty hereunder if the infringing activities had been made by Company.

(b) In the event Company elects not to initiate an action to enforce the Patent Rights against infringement by a third party within the Field, within one (1) year of a request by Mayo to do so, (or within such shorter period which may be required to preserve the legal rights of Mayo under the laws of the relevant government), Mayo may initiate such action at its expense with Company’s consent, which consent shall not be unreasonably withheld. Company shall have the right to participate in any such action with counsel of its own choice at its own expense. All recoveries received by Mayo from an action to enforce the Patent Rights shall be first applied to reimburse Mayo's and then Company's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringement of the Patent Rights in the Field, be divided [***] percent ([***]%) to Company and [***] percent ([***]%) to Mayo.

9.2 Defense. If Company, its Affiliate, Sublicensee, distributor or other customer is sued by a third party charging infringement of patent rights that dominate a claim of the Patent Rights or that cover other Related Material with respect to the manufacture, use, distribution or sale of a Licensed Product, Company will promptly notify Mayo. As between the parties to this Agreement, Company will be entitled to control the defense in any such action(s) and withhold ten percent (10%) of the royalties related to such Licensed Product otherwise payable to Mayo and use the withheld royalties to reimburse the legal defense costs, attorneys' fees and liability incurred in such infringement suit(s). Notwithstanding the foregoing, Company agrees to withhold only that portion of such royalties as may reasonably be necessary to reimburse amounts in accordance with this Section 9.2. For clarity, if Company is required to pay a royalty or other amounts to a third party to make and/or sell a Licensed Product as a result of a final judgment or settlement; such amounts may be deducted from the running royalties payable to Mayo hereunder in accordance with Section 3.6(c) above.

9.3 Cooperation. In any suit, action or other proceeding in connection with enforcement and/or defense of the Patent Rights, Mayo shall reasonably cooperate, including without limitation, by executing such documents as Company may reasonably request. Upon the request of and, at the sole expense of Company, Mayo shall make available at reasonable times

and under appropriate conditions all relevant personnel, records, papers, information, samples, specimens and other similar materials in Mayo's possession. In the absence of an agreement to institute a suit jointly, Mayo shall not be required to join such action unless it has agreed to do so in writing prior to the commencement thereof, or unless deemed by the court as a necessary party. Company will bear the entire cost of such litigation, including attorneys' fees.

9.4 No Implied Obligations. Except as expressly provided in this Article 9, neither party has any obligation to bring or prosecute actions or suits against any third party for patent infringement.

ARTICLE 10
INDEMNIFICATION & INSURANCE

10.1 Company shall hold harmless and indemnify Mayo, its trustees, directors, officers, employees, agents and the successor and assigns of any of the foregoing (collectively, the "Indemnitees"), and hold each Indemnitee harmless from and against any and all losses, costs, expenses, damages and liabilities resulting from claims, actions, demands, judgments, suits or proceedings brought by third parties (including, without limitation, reasonable attorneys' fees and other expenses of litigation) (any of the foregoing, a "Claim"), regardless of the legal theory asserted, against any Indemnitee, arising from or occurring as a result of: (a) the exercise or practice by Company or its Affiliates or Sublicensees of the rights and licenses granted under this Agreement, and (b) the research, development, design, manufacture, distribution, use, sale, importation, exportation or other disposition of Licensed Products by Company or its Affiliates or Sublicensees; except and to the extent that such Claim(s) arise from or are related to a breach by Mayo of any of its representations or warranties in Section 12.1. Any Indemnitee that intends to claim indemnification under this Article 10 shall: (i) promptly notify Company in writing of any Claim with respect to which the Indemnitee intends to claim such indemnification, (ii) give Company sole control of the defense and/or settlement thereof, and (iii) provide Company, at Company's expense, with reasonable assistance and full information reasonably available to Mayo with respect to such Claim. Company shall not settle any claim, suit or proceeding subject to this Article 10 or otherwise consent to an adverse judgment in such claim, suit or proceeding if the same materially diminishes the rights or interests of the Indemnitee without the express written consent of the Indemnitee. Notwithstanding the foregoing, Company shall have no obligations for any Claim if the Indemnitee seeking indemnification makes any admission, settlement or other communication regarding such Claim (unless made truthfully under a circumstance that legally requires such act by Mayo, in which case Mayo shall use its best efforts to inform Company of such of its intent to make such admission prior to making it) without the prior written consent of Company, which consent shall not be unreasonably withheld

10.2 Insurance.

(a) No later than sixty (60) days following the Effective Date, Company will obtain, keep in force and maintain general liability insurance with minimum coverage limits of at least [***] U.S. Dollars (US $[***]).

(b) No later than sixty (60) days prior the initiation of the first human clinical testing of the first Licensed Product, Company will obtain, keep in force and maintain occurrence-based liability insurance, including contractual liability, with minimum coverage limits of at least [***] U.S. Dollars (US $[***]),

(c) No later than sixty (60) days prior the first commercial sale of the first Licensed Product, Company will obtain, keep in force and maintain occurrence-based liability insurance, including products liability and contractual liability, in an amount and for a time period sufficient to cover the liability assumed by Company hereunder during the Term and after, such amount being at least [***] U.S. Dollars (US $[***]) .

(d) Company's policies will name Mayo and its Affiliates as additional-named insureds. The minimum limits of any insurance coverage required herein shall not limit Company's liability.

ARTICLE 11
USE OF NAMES

Except as required by law or in the normal course of business identification, neither Company nor Mayo shall issue any press release or other written statements in connection with this Agreement intended for use in the public media in a manner suggesting any endorsement by the other of Company or Mayo respectively, without the approval of such other party. Company will not use for publicity, promotion or other purpose, any logo, name, trade name, service mark or trademark of Mayo or its Affiliates, including, but not limited to, the terms "Mayo®," "Mayo Clinic®" and the triple shield Mayo logo, or any simulation, abbreviation or adaptation of the same, or the name of any Mayo employee or agent, without Mayo's prior, written, express consent. With regard to the use of Mayo's name, all requests for approval pursuant to this Section must be submitted to the Mayo Clinic Public Affairs Business Relations Group, at the following e-mail address: PublicAffairsBR@Mayo.edu at least ten (10) business days prior to the date on which a response is needed.

ARTICLE 12
REPRESENTATIONS AND WARRANTIES

12.1 Representations & Warranties by Mayo. (a) Mayo has the sole right and authority to enter into this Agreement and grant the rights and licenses hereunder; (b) Mayo has not previously granted any rights under the Licensed Subject Matter or Proprietary Research Tools to any third party and will not grant any rights in the Proprietary Research Tools and Patent Rights (other than Research Tool Patent Claims with respect to Research Tools that Company has declined to designate as Proprietary Research Tools) to any third party during the term of this Agreement (it being understood that some Licensed Subject Matter and Proprietary Research Tools may be co-owned by third parties and Mayo makes no representations as to how such third parties may have disposed of their rights in such co-owned Licensed Subject Matter and Proprietary Research Tools); (c) to the best of the knowledge of Mayo Clinic Ventures ("MCV"), which is the business unit of Mayo that is in-charge of intellectual property protection and commercialization, there are no claims of third parties as of the Effective Date that would

call into question the rights of Mayo to grant to Company the rights contemplated hereunder; and (d) to the best of MCV's knowledge, except for the Patent Rights, as of the Effective Date, Mayo does not own or control any patent or patent application (including any invention disclosure or draft patent application for which a patent application is intended to be filed) the claims of which would dominate any practice of the Licensed Subject Matter.

12.2 Representations & Warranties by Company. Company warrants and represents to Mayo that:

(a) it has independently evaluated the Patent Rights, Know-How and Proprietary Research Tools and their applicability or utility in Company's activities, and Company is entering into this Agreement on the basis of its own evaluation of such applicability or utility and not in reliance of any representation by Mayo with respect thereto, and assumes all risk and liability in connection with such determination;

(b) it will obtain and maintain insurance coverage as set forth in Section 10.2;

(c) the execution and delivery of this Agreement has been duly authorized and no further approval, corporate or otherwise, is required in order to execute this binding Agreement;

(d) it shall comply and require its Sublicensees to comply with all applicable international, national and state laws, ordinances and regulations in its performance under this Agreement; and

(e) its rights and obligations under this Agreement do not conflict with any contractual obligation or court or administrative order by which it is bound.

12.3 Disclaimers.

(a) EXCEPT AS PROVIDED IN THIS ARTICLE 12, NEITHER PARTY MAKES ANY WARRANTIES OR CONDITIONS (EXPRESS, IMPLIED, STATUTORY OR OTHERWISE) WITH RESPECT TO THE SUBJECT MATTER HEREOF.

(b) EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY PROMISES, COVENANTS, GUARANTEES, REPRESENTATIONS OR WARRANTIES OF ANY NATURE, DIRECTLY OR INDIRECTLY, EXPRESS, STATUTORY OR IMPLIED, INCLUDING WITHOUT LIMITATION IN THE CASE OF MAYO, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SUITABILITY, DURABILITY, CONDITION, QUALITY OR ANY OTHER CHARACTERISTIC OF THE PATENT RIGHTS, KNOW-HOW OR CONFIDENTIAL INFORMATION. SUBJECT TO THE TERMS, REPRESENTATIONS AND WARRANTIES EXPRESSLY PROVIDED IN THIS AGREEMENT, PATENT RIGHTS, KNOW-HOW AND CONFIDENTIAL INFORMATION ARE PROVIDED "AS IS." SUBJECT TO COMPANY'S RIGHTS AT LAW OR IN EQUITY TO SEEK REDRESS FOR ANY BREACH BY MAYO OF THE REPRESENTATIONS AND WARRANTIES EXPRESSLY PROVIDED BY MAYO IN THIS AGREEMENT, COMPANY EXPRESSLY WAIVES ALL RIGHTS TO MAKE ANY CLAIM WHATSOEVER AGAINST MAYO FOR MISREPRESENTATION OR FOR BREACH OF GUARANTEE, REPRESENTATION OR WARRANTY OF ANY KIND

RELATING TO THE PATENT RIGHTS, KNOW-HOW OR CONFIDENTIAL INFORMATION. MAYO EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES ARISING FROM ANY COURSE OF DEALING, USAGE OR TRADE PRACTICE, WITH RESPECT TO: THE SCOPE, VALIDITY OR ENFORCEABILITY OF THE PATENT RIGHTS, KNOW-HOW AND CONFIDENTIAL INFORMATION; THAT ANY PATENT WILL ISSUE BASED UPON ANY PENDING PATENT APPLICATION; OR THAT THE USE, SALE, OFFER FOR SALE OR IMPORTATION OF THE PATENT RIGHTS, KNOW-HOW OR MATERIALS WILL NOT INFRINGE OTHER INTELLECTUAL PROPERTY RIGHTS. WITHOUT LIMITING MAYO'S OBLIGATIONS UNDER SECTION 9.3 ABOVE TO COOPERATE WITH COMPANY WITH RESPECT TO ENFORCEMENT OF THE PATENT RIGHTS, NOTHING IN THIS AGREEMENT WILL BE CONSTRUED AS AN OBLIGATION FOR MAYO TO BRING, PROSECUTE OR DEFEND ACTIONS REGARDING THE PATENT RIGHTS, KNOW-HOW AND CONFIDENTIAL INFORMATION.

ARTICLE 13
GENERAL

13.1 Patent Marking. Company agrees to mark, and require its Affiliates and Sublicensees to mark, all Licensed Products sold with all applicable patent numbers or otherwise conform to patent laws and practices of the country in which such Licensed Product is sold.

13.2 No Implied Obligations. Company's sole obligation to exploit the Licensed Subject Matter is as set forth in Articles 5. Nothing in this Agreement shall be deemed to require Company to otherwise exploit the Licensed Subject Matter nor prevent Company from commercializing products similar to or competitive with a Licensed Product.

13.3 Independent Contractors. The relationship of Mayo and Company established by this Agreement is that of independent contractors. Nothing in this Agreement shall be construed to create any other relationship between Mayo and Company. Neither party shall have any right, power or authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other.

13.4 Confidential Terms. Except as expressly provided herein, each party agrees not to disclose any terms of this Agreement to any third party without the consent of the other party, except as required by securities or other applicable laws, to prospective and other investors and such party's accountants, attorneys and other professional advisors.

13.5 Assignment. This Agreement may not be assigned by Company without the prior written consent of Mayo, except to a party that succeeds to all or substantially all of Company's business or assets relating to this Agreement whether by sale, merger, operation of law or otherwise; provided that such assignee or transferee promptly agrees in writing to be bound by the terms and conditions of this Agreement. Mayo may assign its right to receive payments hereunder upon prior written notice to Company.

13.6 Force Majeure. In the event either party hereto is prevented from or delayed in the performance of any of its obligations hereunder by reason of acts of God, war, strikes, riots,

storms, fires, or any other cause whatsoever beyond the reasonable control of the party, the party so prevented or delayed shall be excused from the performance of any such obligation to the extent and during the period of such prevention or delay.

13.7 Notices. Any notice or other communication required by this Agreement shall be made in writing and given by prepaid, first class, certified mail, return receipt requested, and shall be deemed to have been served on the date received by the addressee at the following address or such other address as may from time to time be designated to the other party in writing:

If to Mayo: Mayo Foundation for Medical Education and Research
Mayo Clinic Ventures – BB4
200 First Street SW
Rochester, MN 55905-0001
Attn: [***]
Phone: [***]
Facsimile: [***]
Email: [***]

If to Company: Cenexys, Inc.
1700 Owens St., Suite 535,
San Francisco, CA 94158
Attn: [***]
Phone: [***]
Email: [***]

with a copy to: Wilson Sonsini Goodrich & Rosati
650 Page Mill Road
Palo Alto, California 94304-1050
Attn: [***]

13.8 Compliance with Law. Company shall comply with all applicable federal, state and local laws and regulations in connection with its activities pursuant to this Agreement.

13.9 Governing Law. This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of New York, without reference to its principles of conflicts of law.

13.10 No Waiver. A waiver, express or implied, by either Mayo or Company of any right under this Agreement or of any failure to perform or breach hereof by the other party hereto shall not constitute or be deemed to be a waiver of any other right hereunder or of any other failure to perform or breach hereof by such other party, whether of a similar or dissimilar nature thereto.

13.11 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY OR ANY THIRD PARTY FOR ANY SPECIAL, CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES (INCLUDING LOST OR ANTICIPATED

REVENUES OR PROFITS RELATING TO THE SAME), ARISING FROM ANY CLAIM RELATING TO THIS AGREEMENT, WHETHER SUCH CLAIM IS BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, EVEN IF AN AUTHORIZED REPRESENTATIVE OF SUCH PARTY IS ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SAME. IN NO EVENT WILL MAYO'S LIABILITY OF ANY KIND INCLUDE ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE LOSSES OR DAMAGES, EVEN IF MAYO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR EXCEED THE TOTAL COMPENSATION THAT HAS ACTUALLY BEEN PAID TO MAYO BY COMPANY AS OF THE DATE OF FILING AN ACTION AGAINST MAYO THAT RESULTS IN THE SETTLEMENT OR AWARD OF DAMAGES TO COMPANY.

13.12 Headings. Headings included herein are for convenience only, do not form a part of this Agreement and shall not be used in any way to construe or interpret this Agreement.

13.13 Severability. If any provision of this Agreement shall be found by a court to be void, invalid or unenforceable, the same shall be reformed to comply with applicable law or stricken if not so conformable, so as not to affect the validity or enforceability of the remainder of this Agreement.

13.14 Entire Agreement. This Agreement constitutes the entire understanding and agreement between the parties with respect to the subject matter hereof and supersedes any and all prior negotiations, representations, agreements, and understandings, written or oral, that the parties may have reached with respect to the subject matter hereof. No agreements altering or supplementing the terms hereof may be made except by means of a written document signed by the duly authorized representatives of each of the parties hereto. It is understood that the Research Agreement is separate and independent from this Agreement and termination of either agreement shall not operate to terminate or otherwise effect the rights and obligations of the parties under the other agreement.

13.15 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but both of which together shall constitute one and the same instrument, and photocopy, facsimile, electronic or other copies shall have the same effect for all purposes as an inked original. Each party hereto consents to be bound by photocopy, electronic or facsimile signatures of each party's representative hereto.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized representatives to execute this Agreement.

Mayo Foundation for Medical Education and Research ("Mayo")	Cenexys, Inc. ("Company")
By:/s/ Daniel D. Estes	By: /s/ Nathaniel David
Name: Daniel D. Estes	Name: Nathaniel David
Title: Assistant Treasurer	Title: CEO

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT A
PATENT RIGHTS

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT B
STOCK PURCHASE AGREEMENT

CENEXYS, INC.

STOCK PURCHASE AGREEMENT

This Stock Purchase Agreement (the "***Agreement***") is made as of [_____, 2013] by and between Cenexys, Inc., a Delaware corporation (the "***Company***"), and Mayo Foundation for Medical Education and Research (the "***Purchaser***").

In consideration of the mutual covenants and representations set forth below, the Company and the Purchaser agree as follows:

1. **Purchase and Sale of the Shares.** Subject to the terms and conditions of this Agreement, the Company agrees to sell to the Purchaser and the Purchaser agrees to purchase from the Company on the Closing (as defined below) 2,000,000 shares of the Company's Common Stock, par value $0.0001 per share (the "***Shares***"), at a price of $0.006 per share (the "***Purchase Price***"), for an aggregate purchase price of $12,000.00.

2. **Closing.** The purchase and sale of the Shares shall occur at a closing (the "***Closing***") to be held on the date first set forth above, or at any other time mutually agreed upon by the Company and the Purchaser. The Closing will take place at the principal office of the Company or at such other place as shall be designated by the Company. At the Closing, the Purchaser shall deliver the aggregate Purchase Price set forth above to the Company by wire transfer, check or any other method of payment permissible under applicable law and approved by the Company's board of directors (or any combination of such methods of payment), and the Company will issue, as promptly thereafter as practicable, a stock certificate, registered in the name of the Purchaser, reflecting the Shares.

3. **Limitation on Payments.**

A. ***Payments Limitation.*** In the event that the severance and other benefits provided for in this Agreement or otherwise payable to the Purchaser (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) would be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then the Purchaser's benefits under this Agreement shall be either

(1) delivered in full, or

(2) delivered as to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax,

whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by the Purchaser on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Section 4999 of the Code. Any reduction in payments and/or benefits required by this Section 3 will occur in the following order: (1) reduction of cash payments; (2) reduction of vesting acceleration of equity awards; and (3) reduction of other benefits paid or provided to Purchaser. In the event that acceleration of vesting of equity awards is to be reduced, such acceleration of vesting will be cancelled in the reverse order of the

date of grant for Purchaser's equity awards. If two or more equity awards are granted on the same date, each award will be reduced on a *pro-rata* basis. In no event will Purchaser exercise any discretion with respect to the ordering of any reductions of payments or benefits under this Section 3.

B. ***Determination.*** Unless the Company and the Purchaser otherwise agree in writing, any determination required under this Section 3 shall be made in writing by the Company's independent public accountants or a national "Big Four" accounting firm selected by the Company (the "***Accountants***"), whose determination shall be conclusive and binding upon the Purchaser and the Company for all purposes. For purposes of making the calculations required by this Section 3, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Section 280G and 4999 of the Code. The Company and the Purchaser shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section 3. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 3.

4. **Restrictions on Transfer.**

A. ***Investment Representations and Legend Requirements.*** The Purchaser hereby makes the investment representations listed on **Exhibit A** to the Company as of the date of this Agreement and as of the date of the Closing, and agrees that such representations are incorporated into this Agreement by this reference, such that the Company may rely on them in issuing the Shares. The Purchaser understands and agrees that the Company shall cause the legends set forth below, or substantially equivalent legends, to be placed upon any certificate(s) evidencing ownership of the Shares, together with any other legends that may be required by the Company or by applicable state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "***ACT***") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER, A RIGHT OF FIRST REFUSAL, A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING AND A REPURCHASE OPTION HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE STOCK PURCHASE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS, RIGHT OF FIRST REFUSAL, LOCK-UP PERIOD AND REPURCHASE OPTION ARE BINDING ON TRANSFEREES OF THESE SHARES.

B. ***Stop-Transfer Notices.*** The Purchaser agrees that to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

C. ***Refusal to Transfer.*** The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

D. ***Lock-Up Period.*** The Purchaser hereby agrees that the Purchaser shall not sell, offer, pledge, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, grant any right or warrant to purchase, lend or otherwise transfer or encumber, directly or indirectly, any Shares or other securities of the Company, nor shall the Purchaser enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Shares or other securities of the Company, during the period from the filing of the first registration statement of the Company filed under the Securities Act of 1933, as amended (the "***Securities Act***"), that includes securities to be sold on behalf of the Company to the public in an underwritten public offering under the Securities Act through the end of the 180-day period following the effective date of such registration statement (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The Purchaser further agrees, if so requested by the Company or any representative of its underwriters, to enter into such underwriter's standard form of "lockup" or "market standoff" agreement in a form satisfactory to the Company and such underwriter. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of any such restriction period.

E. ***Shares.*** No Shares purchased pursuant to this Agreement, nor any beneficial interest in such Shares, shall be sold, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Purchaser or any subsequent transferee, other than in compliance with the Company's right of first refusal provisions contained in Section 5 of this Agreement.

5. **Company's Right of First Refusal.** Before any Shares acquired by the Purchaser pursuant to this Agreement (or any beneficial interest in such Shares) may be sold, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Purchaser or any subsequent transferee (each a "***Holder***"), such Holder must first offer such Shares or beneficial interest to the Company and/or its assignee(s) as follows:

A. ***Notice of Proposed Transfer.*** The Holder shall deliver to the Company a written notice stating: (i) the Holder's *bona fide* intention to sell or otherwise transfer the Shares; (ii) the name of each proposed transferee; (iii) the number of Shares to be transferred to each proposed transferee; (iv) the *bona fide* cash price or other consideration for which the Holder proposes to transfer the Shares; and (v) that by delivering the notice, the Holder offers all such Shares to the Company and/or its assignee(s) pursuant to this section and on the same terms described in the notice.

B. ***Exercise of Right of First Refusal.*** At any time within 30 days after receipt of the Holder's notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the proposed transferees, at the purchase price determined in accordance with Section 5.C.

C. ***Purchase Price.*** The purchase price for the Shares purchased by the Company and/or its assignee(s) under this section shall be the price listed in the Holder's notice. If the price listed in the Holder's notice includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the board of directors of the Company in its sole discretion.

D. ***Payment.*** Payment of the purchase price shall be made, at the option of the Company and/or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company and/or its assignee(s), or by any combination thereof within 30 days after receipt by the Company of the Holder's notice (or at such later date as is called for by such notice).

E. ***Holder's Right to Transfer.*** If all of the Shares proposed in the notice to be transferred to a given proposed transferee are not purchased by the Company and/or its assignee(s) as provided in this section, then the Holder may sell or otherwise transfer such Shares to that proposed transferee; *provided that*: (i) the transfer is made only on the terms provided for in the notice, with the exception of the purchase price, which may be either the price listed in the notice or any higher price; (ii) such transfer is consummated within 60 days after the date the notice is delivered to the Company; (iii) the transfer is effected in accordance with any applicable securities laws, and if requested by the Company, the Holder shall have delivered an opinion of counsel acceptable to the Company to that effect; and (iv) the proposed transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section. If any Shares described in a notice are not transferred to the proposed transferee within the period provided above, then before any such Shares may be transferred, a new notice shall be given to the Company, and the Company and/or its assignees shall again be offered the right of first refusal described in this section.

F. ***Involuntary Transfers.*** Subject to the other provisions of this Section 5, in the event, at any time after the date of this Agreement, of any transfer by operation of law or other involuntary transfer (including, but not limited to, transfers by operation of law or other involuntary transfers in connection with a divorce, dissolution, legal separation or annulment) of all or a portion of the Shares by the record holder thereof that does not occur in accordance with the other provisions of this Section 5, the Company shall have the right to purchase all of the Shares transferred at the greater of the purchase price paid by Purchaser pursuant to this Agreement or the fair market value of the Shares on the date of transfer (as determined by the board of directors of the Company). Upon such a transfer, the persons transferring or acquiring the Shares shall promptly notify the Secretary of the Company in writing of such transfer. The right to purchase such Shares shall be provided to the Company for a period of 30 days following receipt by the Company of written notice of the transfer.

G. ***Exception for Certain Family Transfers.*** Notwithstanding anything to the contrary contained elsewhere in this section, the transfer of any or all of the Shares during the Holder's lifetime (except in connection with a divorce, dissolution, legal separation or annulment) or on the Holder's death by will or intestacy to (i) the Holder's spouse or domestic partner; (ii) the Holder's lineal descendants or antecedents, siblings, aunts, uncles, nieces and nephews (including adoptive relationships and step relationships), and their spouses or domestic partners; and (iv) a trust or other similar estate planning vehicle for the benefit of the Holder or any such person, shall be exempt from the provisions of this section; *provided* that, in each such case, the transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section; and *provided further*, that without the prior written consent of the Company, which may be withheld in the sole discretion of the Company, no more than three transfers may be made pursuant to this section, including all transfers by the Holder and all transfers by any transferee. For purposes of this Agreement, a person will be deemed to be a "***domestic partner***" of another person if the two persons (1) reside in the same residence and plan to do so indefinitely, (2) have resided together for at least one year, (3) are each at least 18 years of age and mentally competent to consent to contract, (4) are not blood relatives any closer than would prohibit legal marriage in the state in which they reside, (5) are financially interdependent, as demonstrated to the reasonable satisfaction of the Company and (6) have each been the sole spouse equivalent of the other for

the year prior to the transfer and plan to remain so indefinitely; *provided* that a person will not be considered a domestic partner if he or she is married to another person or has any other spouse equivalent.

H. ***Termination of Right of First Refusal.*** The rights contained in this section shall terminate as to all Shares purchased hereunder upon the earlier of: (i) the closing date of the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act, and (ii) the closing date of a Change of Control pursuant to which the holders of the outstanding voting securities of the Company receive securities of a class registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended.

6. **Tax Consequences.** The Purchaser has reviewed with the Purchaser's own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. The Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. The Purchaser understands that the Purchaser (and not the Company) shall be responsible for any tax liability that may arise as a result of the transactions contemplated by this Agreement.

7. **General Provisions.**

A. ***Choice of Law.*** This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of California.

B. ***Integration.*** This Agreement, including all exhibits hereto, represents the entire agreement between the parties with respect to the purchase of the Shares by the Purchaser and supersedes and replaces any and all prior written or oral agreements regarding the subject matter of this Agreement including, but not limited to, any representations made during any interviews, relocation discussions or negotiations whether written or oral.

C. ***Notices.*** Any notice, demand, offer, request or other communication required or permitted to be given by either the Company or the Purchaser pursuant to the terms of this Agreement shall be in writing and shall be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one business day after being delivered by facsimile (with receipt of appropriate confirmation), (iv) one business day after being deposited with an overnight courier service or (v) four days after being deposited in the U.S. mail, First Class with postage prepaid and return receipt requested, and addressed to the parties at the addresses provided to the Company (which the Company agrees to disclose to the other parties upon request) or such other address as a party may request by notifying the other in writing.

D. ***Successors.*** Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this section or which becomes bound by the terms of this Agreement by operation of law. Subject to the restrictions on transfer set forth in this Agreement, this Agreement shall be binding upon the Purchaser and his or her heirs, executors, administrators, successors and assigns.

E. ***Assignment; Transfers.*** Except as set forth in this Agreement, this Agreement, and any and all rights, duties and obligations hereunder, shall not be assigned, transferred, delegated or sublicensed by the Purchaser without the prior written consent of the Company. Any attempt by the Purchaser without such consent to assign, transfer, delegate or sublicense any rights, duties or obligations that arise under this Agreement shall be void. Except as set forth in this Agreement, any transfers in violation of any restriction upon transfer contained in any section of this Agreement shall be void, unless such restriction is waived in accordance with the terms of this Agreement.

F. ***Waiver*****.** Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, nor prevent that party from thereafter enforcing any other provision of this Agreement. The rights granted both parties hereunder are cumulative and shall not constitute a waiver of either party's right to assert any other legal remedy available to it.

G. ***Purchaser Investment Representations and Further Documents*****.** The Purchaser agrees upon request to execute any further documents or instruments necessary or reasonably desirable in the view of the Company to carry out the purposes or intent of this Agreement, including (but not limited to) the applicable exhibits and attachments to this Agreement.

H. ***Severability*****.** Should any provision of this Agreement be found to be illegal or unenforceable, the other provisions shall nevertheless remain effective and shall remain enforceable to the greatest extent permitted by law.

I. ***Rights as Stockholder*****.** Subject to the terms and conditions of this Agreement, the Purchaser shall have all of the rights of a stockholder of the Company with respect to the Shares from and after the date that the Purchaser delivers a fully executed copy of this Agreement (including the applicable exhibits and attachments to this Agreement) and full payment for the Shares to the Company, and until such time as the Purchaser disposes of the Shares in accordance with this Agreement. Upon such transfer, the Purchaser shall have no further rights as a holder of the Shares so purchased except (in the case of a transfer to the Company) the right to receive payment for the Shares so purchased in accordance with the provisions of this Agreement, and the Purchaser shall forthwith cause the certificate(s) evidencing the Shares so purchased to be surrendered to the Company for transfer or cancellation.

J. ***Adjustment for Stock Split.*** All references to the number of Shares and the purchase price of the Shares in this Agreement shall be adjusted to reflect any stock split, stock dividend or other change in the Shares which may be made after the date of this Agreement.

K. ~~***Employment at Will.*** THE PURCHASER ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THIS AGREEMENT IS EARNED ONLY BY CONTINUING SERVICE AS A SERVICE PROVIDER AT WILL (AND NOT THROUGH THE ACT OF BEING HIRED OR PURCHASING SHARES HEREUNDER). THE PURCHASER FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, OR FOR ANY PERIOD AT ALL, AND SHALL NOT INTERFERE WITH THE PURCHASER'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE THE PURCHASER'S RELATIONSHIP WITH THE COMPANY AT ANY TIME, WITH OR WITHOUT CAUSE OR NOTICE.~~ /s/ DE 7-3-13

L. ***Arbitration and Equitable Relief.***

(1) *Arbitration.* IN CONSIDERATION OF THE PROMISES IN THIS AGREEMENT, THE PURCHASER AGREES THAT ANY AND ALL CONTROVERSIES, CLAIMS, OR DISPUTES WITH ANYONE (INCLUDING THE COMPANY AND ANY EMPLOYEE, OFFICER, DIRECTOR, SHAREHOLDER OR BENEFIT PLAN OF THE COMPANY IN THEIR CAPACITY AS SUCH OR OTHERWISE) ARISING OUT OF, RELATING TO, OR RESULTING FROM THIS AGREEMENT, SHALL BE SUBJECT TO BINDING ARBITRATION UNDER THE ARBITRATION RULES SET FORTH IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1280 THROUGH 1294.2, INCLUDING SECTION 1283.05 (THE "***RULES***") AND PURSUANT TO CALIFORNIA LAW. DISPUTES WHICH THE PURCHASER AGREES TO ARBITRATE, AND THEREBY AGREES TO WAIVE ANY RIGHT TO A TRIAL BY JURY, INCLUDE ANY STATUTORY CLAIMS UNDER STATE OR FEDERAL LAW, INCLUDING, BUT NOT LIMITED TO, CLAIMS UNDER TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, THE AMERICANS WITH DISABILITIES ACT OF 1990, THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967, THE OLDER WORKERS BENEFIT PROTECTION ACT, THE WORKER ADJUSTMENT AND RETRAINING NOTIFICATION ACT, THE CALIFORNIA FAIR EMPLOYMENT AND HOUSING ACT, THE FAMILY AND MEDICAL LEAVE ACT, THE CALIFORNIA FAMILY RIGHTS ACT, THE CALIFORNIA LABOR CODE, CLAIMS OF HARASSMENT, DISCRIMINATION OR WRONGFUL TERMINATION AND ANY STATUTORY CLAIMS. THE PURCHASER FURTHER UNDERSTANDS THAT THIS AGREEMENT TO ARBITRATE ALSO APPLIES TO ANY DISPUTES THAT THE COMPANY MAY HAVE WITH THE PURCHASER.

(2) *Procedure.* THE PURCHASER AGREES THAT ANY ARBITRATION WILL BE ADMINISTERED BY THE AMERICAN ARBITRATION ASSOCIATION ("***AAA***") AND THAT THE NEUTRAL ARBITRATOR WILL BE SELECTED IN A MANNER CONSISTENT WITH ITS NATIONAL RULES FOR THE RESOLUTION OF EMPLOYMENT DISPUTES. THE PURCHASER AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO DECIDE ANY MOTIONS BROUGHT BY ANY PARTY TO THE ARBITRATION, INCLUDING MOTIONS FOR SUMMARY JUDGMENT AND/OR ADJUDICATION AND MOTIONS TO DISMISS AND DEMURRERS, PRIOR TO ANY ARBITRATION HEARING. THE PURCHASER ALSO AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO AWARD ANY REMEDIES, INCLUDING ATTORNEYS' FEES AND COSTS, AVAILABLE UNDER APPLICABLE LAW. PURCHASER UNDERSTANDS THAT THE COMPANY WILL PAY FOR ANY ADMINISTRATIVE OR HEARING FEES CHARGED BY THE ARBITRATOR OR AAA EXCEPT THAT PURCHASER SHALL PAY THE FIRST $125.00 OF ANY FILING FEES ASSOCIATED WITH ANY ARBITRATION PURCHASER INITIATES. PURCHASER AGREES THAT THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN A MANNER CONSISTENT WITH THE RULES AND THAT TO THE EXTENT THAT THE AAA'S NATIONAL RULES FOR THE RESOLUTION OF EMPLOYMENT DISPUTES CONFLICT WITH THE RULES, THE RULES SHALL TAKE PRECEDENCE. THE PURCHASER AGREES THAT THE DECISION OF THE ARBITRATOR SHALL BE IN WRITING.

(3) *Remedy.* EXCEPT AS PROVIDED BY THE RULES AND THIS AGREEMENT, ARBITRATION SHALL BE THE SOLE, EXCLUSIVE AND FINAL REMEDY FOR ANY DISPUTE BETWEEN THE PURCHASER AND THE COMPANY. ACCORDINGLY, EXCEPT AS PROVIDED FOR BY THE RULES AND THIS AGREEMENT, NEITHER THE PURCHASER NOR THE COMPANY WILL BE PERMITTED TO PURSUE COURT ACTION REGARDING CLAIMS THAT ARE SUBJECT TO ARBITRATION. NOTWITHSTANDING, THE ARBITRATOR WILL NOT HAVE THE AUTHORITY TO DISREGARD OR REFUSE TO ENFORCE ANY LAWFUL COMPANY POLICY, AND THE ARBITRATOR SHALL NOT ORDER OR REQUIRE THE COMPANY TO ADOPT A POLICY NOT OTHERWISE REQUIRED BY LAW WHICH THE COMPANY HAS NOT ADOPTED.

(4) *Availability of Injunctive Relief.* BOTH PARTIES AGREE THAT ANY PARTY MAY PETITION A COURT FOR INJUNCTIVE RELIEF AS PERMITTED BY THE RULES INCLUDING, BUT NOT LIMITED TO, WHERE EITHER PARTY ALLEGES OR CLAIMS A VIOLATION OF ANY CONFIDENTIAL INFORMATION OR INVENTION ASSIGNMENT AGREEMENT BETWEEN THE PURCHASER AND THE COMPANY OR ANY OTHER AGREEMENT REGARDING TRADE SECRETS, CONFIDENTIAL INFORMATION, NONSOLICITATION OR LABOR CODE §2870. BOTH PARTIES UNDERSTAND THAT ANY BREACH OR THREATENED BREACH OF SUCH AN AGREEMENT WILL CAUSE IRREPARABLE INJURY AND THAT MONEY DAMAGES WILL NOT PROVIDE AN ADEQUATE REMEDY THEREFOR AND BOTH PARTIES HEREBY CONSENT TO THE ISSUANCE OF AN INJUNCTION. IN THE EVENT EITHER PARTY SEEKS INJUNCTIVE RELIEF, THE PREVAILING PARTY SHALL BE ENTITLED TO RECOVER REASONABLE COSTS AND ATTORNEYS' FEES.

(5) *Administrative Relief.* THE PURCHASER UNDERSTANDS THAT THIS AGREEMENT DOES NOT PROHIBIT THE PURCHASER FROM PURSUING AN ADMINISTRATIVE CLAIM WITH A LOCAL, STATE OR FEDERAL ADMINISTRATIVE BODY SUCH AS THE DEPARTMENT OF FAIR EMPLOYMENT AND HOUSING, THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION OR THE WORKERS' COMPENSATION BOARD. THIS AGREEMENT DOES, HOWEVER, PRECLUDE THE PURCHASER FROM PURSUING COURT ACTION REGARDING ANY SUCH CLAIM.

(6) *Voluntary Nature of Agreement.* THE PURCHASER ACKNOWLEDGES AND AGREES THAT THE PURCHASER IS EXECUTING THIS AGREEMENT VOLUNTARILY AND WITHOUT ANY DURESS OR UNDUE INFLUENCE BY THE COMPANY OR ANYONE ELSE. THE PURCHASER FURTHER ACKNOWLEDGES AND AGREES THAT THE PURCHASER HAS CAREFULLY READ THIS AGREEMENT AND THAT THE PURCHASER HAS ASKED ANY QUESTIONS NEEDED FOR THE PURCHASER TO UNDERSTAND THE TERMS, CONSEQUENCES AND BINDING EFFECT OF THIS AGREEMENT AND FULLY UNDERSTANDS IT, INCLUDING THAT ***THE PURCHASER IS WAIVING THE PURCHASER'S RIGHT TO A JURY TRIAL***. FINALLY, THE PURCHASER AGREES THAT THE PURCHASER HAS BEEN PROVIDED AN OPPORTUNITY TO SEEK THE ADVICE OF AN ATTORNEY OF THE PURCHASER'S CHOICE BEFORE SIGNING THIS AGREEMENT.

M. ***Reliance on Counsel and Advisors.*** The Purchaser acknowledges that Wilson Sonsini Goodrich & Rosati, Professional Corporation, is representing only the Company in this transaction. The Purchaser acknowledges that he or she has had the opportunity to review this Agreement, including all attachments hereto, and the transactions contemplated by this Agreement with his or her own legal counsel, tax advisors and other advisors. The Purchaser is relying solely on his or her own counsel and advisors and not on any statements or representations of the Company or its agents for legal or other advice with respect to this investment or the transactions contemplated by this Agreement.

N. ***Counterparts.*** This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Facsimile copies of signed signature pages shall be binding originals.

(*signature page follows*)

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement. The Purchaser agrees to notify the Company of any change in his or her address below.

MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH	**CENEXYS, INC.**
/s/ Daniel D. Estes *Signature*	*Signature*
Daniel D. Estes *Print Name*	*Print Name*
	Print Title

Address:

200 First Street SW
Rochester, MN 55905

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

i. EXHIBIT A

INVESTMENT REPRESENTATION STATEMENT

PURCHASER : Mayo Foundation for Medical Education and Research

COMPANY : Cenexys, Inc.

SECURITY :Common Stock

AMOUNT : 2,000,000 shares

DATE : [_____, 2013]

In connection with the purchase of the above-listed shares, I, the undersigned purchaser, represent to the Company as follows:

1. ***The Company may rely on these representations.*** I understand that the Company's sale of the shares to me has not been registered under the Securities Act of 1933, as amended (the "***Securities Act***"), because the Company believes, relying in part on my representations in this document, that an exemption from such registration requirement is available for such sale. I understand that the availability of this exemption depends upon the representations I am making to the Company in this document being true and correct.

2. ***I am purchasing for investment.*** I am purchasing the shares solely for investment purposes, and not for further distribution. My entire legal and beneficial ownership interest in the shares is being purchased and shall be held solely for my account, except to the extent I intend to hold the shares jointly with my spouse. I am not a party to, and do not presently intend to enter into, any contract or other arrangement with any other person or entity involving the resale, transfer, grant of participation with respect to or other distribution of any of the shares. My investment intent is not limited to my present intention to hold the shares for the minimum capital gains period specified under any applicable tax law, for a deferred sale, for a specified increase or decrease in the market price of the shares, or for any other fixed period in the future.

3. ***I can protect my own interests.*** I can properly evaluate the merits and risks of an investment in the shares and can protect my own interests in this regard, whether by reason of my own business and financial expertise, the business and financial expertise of certain professional advisors unaffiliated with the Company with whom I have consulted, or my preexisting business or personal relationship with the Company or any of its officers, directors or controlling persons.

4. ***I am informed about the Company.*** I am sufficiently aware of the Company's business affairs and financial condition to reach an informed and knowledgeable decision to acquire the shares. I have had opportunity to discuss the plans, operations and financial condition of the Company with its officers, directors or controlling persons, and have received all information I deem appropriate for assessing the risk of an investment in the shares.

5. ***I recognize my economic risk.*** I realize that the purchase of the shares involves a high degree of risk, and that the Company's future prospects are uncertain. I am able to hold the shares indefinitely if required, and am able to bear the loss of my entire investment in the shares.

6. ***I know that the shares are restricted securities*.** I understand that the shares are "restricted securities" in that the Company's sale of the shares to me has not been registered under the Securities Act in reliance upon an exemption for non-public offerings. In this regard, I also understand and agree that:

A. I must hold the shares indefinitely, unless any subsequent proposed resale by me is registered under the Securities Act, or unless an exemption from registration is otherwise available (such as Rule 144);

B. the Company is under no obligation to register any subsequent proposed resale of the shares by me; *and*

C. the certificate evidencing the shares will be imprinted with a legend which prohibits the transfer of the shares unless such transfer is registered or such registration is not required in the opinion of counsel for the Company.

7. ***I am familiar with Rule 144*.** I am familiar with Rule 144 adopted under the Securities Act, which in some circumstances permits limited public resales of "restricted securities" like the shares acquired from an issuer in a non-public offering. I understand that my ability to sell the shares under Rule 144 in the future is uncertain, and may depend upon, among other things: (i) the availability of certain current public information about the Company; (ii) the resale occurring more than a specified period after my purchase and full payment (within the meaning of Rule 144) for the shares; and (iii) if I am an affiliate of the Company (A) the sale being made in an unsolicited "broker's transaction", transactions directly with a market maker or riskless principal transactions, as those terms are defined under the Securities Exchange Act of 1934, as amended, (B) the amount of shares being sold during any three-month period not exceeding the specified limitations stated in Rule 144, *and* (C) timely filing of a notice of proposed sale on Form 144, if applicable.

8. ***I know that Rule 144 may never be available*.** I understand that the requirements of Rule 144 may never be met, and that the shares may never be saleable under the rule. I further understand that at the time I wish to sell the shares, there may be no public market for the Company's stock upon which to make such a sale, or the current public information requirements of Rule 144 may not be satisfied, either of which may preclude me from selling the shares under Rule 144 even if the relevant holding period had been satisfied.

9. ***I know that I am subject to further restrictions on resale*.** I understand that in the event Rule 144 is not available to me, any future proposed sale of any of the shares by me will not be possible without prior registration under the Securities Act, compliance with some other registration exemption (which may or may not be available), or *each* of the following: (i) my written notice to the Company containing detailed information regarding the proposed sale, (ii) my providing an opinion of my counsel to the effect that such sale will not require registration, and (iii) the Company notifying me in writing that its counsel concurs in such opinion. I understand that neither the Company nor its counsel is obligated to provide me with any such opinion. I understand that although Rule 144 is not exclusive, the Staff of the SEC has stated that persons proposing to sell private placement securities other than in a registered offering or pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

10. ***I know that I may have tax liability due to the uncertain value of the shares*.** I understand that the board of directors believes its valuation of the shares represents a fair appraisal of their worth, but that it remains possible that, with the benefit of hindsight, the Internal Revenue Service may successfully assert that the value of the shares on the date of my purchase is substantially greater than the Board's

appraisal. I understand that any additional value ascribed to the shares by such an IRS determination will constitute ordinary income to me as of the purchase date, and that any additional taxes and interest due as a result will be my sole responsibility payable only by me, and that the Company need not and will not reimburse me for that tax liability.

11. ***Residence.*** The address of my principal residence is set forth on the signature page below.

(signature page follows)

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

By signing below, I acknowledge my agreement with each of the statements contained in this Investment Representation Statement as of the date first set forth above, and my intent for the Company to rely on such statements in issuing the shares to me.

MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH

/s/ Daniel D. Estes
Purchaser's Signature

Daniel D. Estes
Print Name

Assistant Treasurer
Title

Address of Purchaser's principal address:

200 First Street SW

Rochester, MN 55905

Exhibit B-13
[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C
PROPRIETARY RESEACH TOOLS

[***]
Exhibit C-1
*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

EXHIBIT D
MATERIAL TRANSFER AGREEMENT

MATERIAL TRANSFER AGREEMENT

Mayo Foundation for Medical Education and Research

Dr. _____ (Recipient Scientist) DATE

COMPANY NAME

ADDRESS

ADDRESS

Mayo Foundation for Medical Education and Research (MAYO) is pleased to be able to provide

INSERT MATERIALS HERE and any components thereof, which we shall refer to throughout this agreement as the "Material," to you at COMPANY NAME (Company). MAYO is interested in supporting research using the Material and will provide you with samples of the Material as long as you agree to certain conditions on your use of the Material. The conditions described below are necessary to insure that the Material is used solely for research and that MAYO's interests in any possible commercialization of the Material are protected. These conditions are:

1. The Material is owned by MAYO and is provided under a license agreement effective as of ____ ("License") between the parties. Upon termination of your research or use of the Material and/or at the instructions of MAYO, you shall either return the Material to MAYO or destroy all unused portions of the Material.

2. Use of the Material must be restricted to research experimentation in compliance with applicable laws and regulations. The Material must not be used in human subjects, in clinical trials, for diagnostic purposes involving human subjects, or to make any derivatives or progeny, as applicable, thereof without the written consent of MAYO.

3. The Material must not be transferred to any other parties, other than researchers at your Company or collaborators that are working on specific research projects on behalf of the Company (and transferred for the purpose of such collaboration) without first having obtained a written agreement to the transfer from MAYO. No researchers working with you

may use the Material unless they are aware of and agree to be bound by the terms of this agreement. Both parties shall comply with all applicable laws and regulations, as amended from time to time, with respect to the collection, use, storage and disclosure of the Material and any related data, including without limitation, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and its implementing regulations (45 C.F.R. et.seq.)

4. Except to the extent prohibited by law, Company will assume all liability for damages which may arise from its use, storage or disposal of the Material. MAYO will not be liable to Company for any loss, claim or demand made by Company or made against Company by any other party, due to or arising from the use of the Material by Company, except to the extent permitted by law when caused by the gross negligence or willful misconduct of MAYO.

5. ANY MATERIAL DELIVERED PURSUANT TO THIS AGREEMENT IS UNDERSTOOD TO BE EXPERIMENTAL IN NATURE AND MAY HAVE HAZARDOUS PROPERTIES. ANY MATERIAL PROVIDED IS PROVIDED AS IS AND MAYO MAKES NO AND HEREBY DISCLAIMS ALL REPRESENTATIONS OR WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE MATERIAL WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK OR OTHER PROPRIETARY RIGHTS.

6. Company agrees to provide appropriate acknowledgement of the source of the Material in all publications.

7. Company agrees to pay $_____ in partial reimbursement of the costs of producing, maintaining and distributing the Material.

8. Company will not use publicly for publicity, promotion, or otherwise, any logo, name, trade name, service mark, or trademark of MAYO or its Affiliates, including, but not limited to the terms “Mayo®,” “Mayo Clinic®,” and the triple shield Mayo logo, or any simulation, abbreviation, or adaptation of the same, or the name of any MAYO employee or agent, without MAYO’s prior, written, express consent, other than provided in Section 6 above. MAYO may withhold such consent in MAYO’s absolute discretion.

9. This agreement, in conjunction with the license agreement, constitutes the final, complete and exclusive agreement between the parties with respect to its subject matter and supercedes all past and contemporaneous agreements, promises, and understandings, whether oral or written, between the parties. This agreement shall be binding upon and inure to the benefit of the parties, their heirs, legal representatives, successors and assigns. This agreement may not be amended or modified except by a writing signed by both parties and identified as an amendment to this agreement. Neither this agreement nor any of the rights or obligations under the agreement may be assigned by Company without the written consent of MAYO. The failure of MAYO to insist at any time upon the strict observance or performance of any of the provisions of this agreement, or to exercise any right or remedy

as provided in this agreement, will not impair any such right or remedy and will not be construed to be a waiver or relinquishment of the right or remedy. Execution of this agreement can be effected by photocopied, scanned or faxed signatures.

If you agree to these conditions, please sign in the space provided below as the Recipient and have an authorized representative of your Company sign where indicated. Return the agreement to Mayo Foundation for Medical Education and Research, Mayo Clinic Ventures, 200 First Street SW, Rochester, MN 55905. Upon receipt of the signed agreement, MAYO will provide the Material as requested.

[SIGNATURES ON THE NEXT PAGE]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH

By: Date:

Daniel D. Estes, Assistant Treasurer

READ AND UNDERSTOOD BY THE RECIPIENT SCIENTIST:

(Recipient Scientist Signature)* (Recipient Scientist)

ACCEPTED AND AGREED BY AUTHORIZED REPRESENTATIVE OF RECEIVING COMPANY

By: Date:

(Authorized Representative's Signature)*

Printed Name and Title:

Company:

Address:

Phone No.:

*Please Note: The Recipient and the Authorized Representative cannot be the same.

Exhibit D-4

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit 10.19B

AMENDMENT NO. 1 TO EXCLUSIVE LICENSE AGREEMENT

THIS Amendment No.1 to Exclusive License Agreement ("Amendment") is made and entered into this 10th day of September 2014 ("Effective Date"), by and between the Mayo Foundation for Medical Education and Research ("Mayo") having its principal place of business at 200 First Street SW, Rochester, MN 55905, and Cenexys, Inc., a Delaware corporation, having a place of business at 1700 Owen Street, Suite 535 San Francisco, CA 94158 ("Company"), for purposes of confirming the parties' intent and agreement as set forth herein.

BACKGROUND

May and Company are parties to an Exclusive License Agreement, with an effective date of the 28th day of June, 2013 ("Agreement"), which confirms the parties' intent and agreement to grant an exclusive license to Mayo's certain patent rights and a nonexclusive license to certain know-how. Mayo and Company wish to amend the Agreement as set forth in this Amendment No. 1, and, accordingly, Mayo and Company agree as follows:

AMENDED TERMS

Exhibit A in its entirety will be deleted and replaced with the exhibit attached to this Amendment No. 1.

All other terms of the Agreement shall remain in full force and effect for the term of the Agreement and as set forth in the Agreement.

IN WITNESS WHEREOF, Mayo and Company hereby enter into this Amendment No. 1, effective as of the date first set forth above.

Cenexys, Inc.

By:/s/ Nathaniel E. David
Nathaniel E. David, Ph.D.
CEO

Mayo Foundation for Medical Education and Research

By: /s/ James A. Rogers, III
James A. Rogers, III
Assistant Secretary

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT A

PATENT RIGHTS

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit 10.19D

AMENDMENT NO. 3 TO EXCLUSIVE LICENSE AGREEMENT

THIS Amendment No. 3 to Exclusive License Agreement ("Amendment 3") is made and entered into this 5th day of May, 2015 ("Effective Date of Amendment 3"), by and between the Mayo Foundation for Medical Education and Research ("Mayo") having its principal place of business at 200 First Street SW, Rochester, Minnesota 55905, and Unity Biotechnology, Inc. (formerly known as Cenexys, Inc.), a Delaware corporation, having a place of business at 1700 Owen Street, Suite 535 San Francisco, California 94158 ("Company"), for purposes of confirming the parties' intent and agreement as set forth herein.

BACKGROUND

Mayo and Company are parties to an Exclusive License Agreement, with an effective date of the 28th day of June, 2013 ("Agreement"), which confirms the parties' intent and agreement to grant an exclusive license to Mayo's certain patent rights and a nonexclusive license to certain know-how along with Amendment No. I and Amendment No. 2 to the Agreement. Mayo and Company wish to amend the Agreement as set forth in this Amendment No. 3, and, accordingly, Mayo and Company agree as follows:

AMENDED TERMS

Exhibit A in its entirety will be deleted and replaced with the exhibit attached to this Amendment No. 3.

All other terms of the Agreement and Amendment No. 2 shall remain in full force and effect for the term of the Agreement and as set forth in the Agreement.

IN WITNESS WHEREOF, Mayo and Company hereby enter into this Amendment No. 3, effective as of the date first set forth above.

Unity Biotechnology, Inc.

By:/s/ Nathaniel E. David
Name: Nathaniel E. David, PhD
Title: President

Mayo Foundation for Medical Education and Research

By: /s/ Daniel D. Estes
Name: Daniel D. Estes
Title: Assistant Treasurer

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT A
PATENT RIGHTS

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit 10.19E

AMENDMENT NO. 4 TO EXCLUSIVE LICENSE AGREEMENT

THIS Amendment No. 4 to Exclusive License Agreement ("Amendment No. 4") is made and entered into this 15th day of September 2016 ("Effective Date of Amendment No. 4"), by and between the Mayo Foundation for Medical Education and Research ("Mayo") having its principal place of business at 200 First Street SW, Rochester, Minnesota 55905, and Unity Biotechnology, Inc. (formerly known as Cenexys, Inc.), a Delaware corporation, having a place of business at 3280 Bayshore Blvd, Brisbane ("Company"), for purposes of confirming the parties' intent and agreement as set forth herein.

BACKGROUND

Mayo and Company are parties to an Exclusive License Agreement, with an effective date of the 28th day of June, 2013 ("Agreement"), which confirms the parties' intent and agreement to grant an exclusive license to Mayo's certain patent rights and a nonexclusive license to certain know-how along with Amendment No. 1, Amendment No. 2, and Amendment No. 3 to the Agreement. Mayo and Company agree that there is no need to amend Exhibit C listing the proprietary research tools. Mayo and Company wish to amend the Agreement as set forth in this Amendment No. 4, and, accordingly, Mayo and Company agree as follows:

AMENDED TERMS

1. Exhibit A in its entirety will be deleted and replaced with the exhibit attached to this Amendment No. 4.

All other terms of the Agreement and Amendment No. 3 shall remain in full force and effect for the term of the Agreement and as set forth in the Agreement.

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

IN WITNESS WHEREOF, Mayo and Company hereby enter into this Amendment No. 4, effective as of the date first set forth above.

Unity Biotechnology, Inc.

By:/s/ Nathaniel E. David

Mayo Foundation for Medical Education and Research

By: /s/ Daniel D. Estes
Name: Daniel D. Estes
Title: Assistant Treasurer

EXHIBIT A

PATENT RIGHTS

[***]

Exhibit 10.19F

Unity Biotechnology
3280 Bayshore Blvd., Suite 100
Brisbane, CA 94005

September 15, 2016

Mayo Foundation for Medical Education and Research 200 First Street SW
Rochester, MN 55905 Attn: Daniel D.
Estes

re: ***Addendum to Amendment 4 to Exclusive License Agreement***

Dear Daniel:

As you know, Mayo Foundation for Medical Education and Research ("Mayo") and Unity Biotechnology, Inc. ("Unity") are parties to an Exclusive License Agreement ("Agreement"), effective as of June 28, 2013. Pursuant to Section 2.2 of the Agreement, Mayo granted to Unity an option to include within the licenses granted under the Agreement any "Additional Developments" (as defined in the Agreement) developed during the IP Capture Period (as defined in the Agreement). In connection with the grant of such option, Mayo further agreed to promptly notify Unity in writing of all Additional Inventions developed by Mayo personnel during the IP Capture Period and to provide Unity with a suitable description of such Additional Invention together with such other information as Unity may reasonably request for purposes of enabling Unity to assess its interest in such Additional Developments.

As requested by Mayo, Unity is providing this letter to confirm that it has received timely notice of the Additional Inventions listed in Appendix A hereto (each such additional Invention identified by Mayo's designated case number) and to provide a summary of which Additional Inventions it has elected to license, which it has declined to license and which Additional Inventions are still under consideration. Appendix A indicates with respect to each Additional Invention whether 1) Unity will be declining a license 2) Unity is exercising its option to a license, or 3) Unity would like to learn more about the Additional Invention from the Mayo innovators before deciding whether to exercise its option. Additionally, as requested by Mayo, Appendix A, also lists those patent applications that have been filed as of the current date for those Additional Inventions exercised under the option.

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

If Mayo is in agreement with the summary provided in Appendix A, we ask that you please so indicate by signing below and kindly returning a copy of this letter to me. A duplicate original is enclosed for your records. If you have any questions or comments, please do not hesitate to contact me at [***] or by e-mail at [***]. Thank you.

Sincerely,

/s/ Nathaniel E. David

Nathaniel E. David, Ph.D.
CEO
Unity Biotechnology, Inc.

Agreed and accepted:

Mayo Foundation for Medical Education and Research

/s/ Daniel D. Estes

Name: Daniel D. Estes
Title: Assistant Treasurer
Date: 9-23-2016

APPENDIX A

[***]

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit 10.19G

AMENDMENT NO. 5 TO EXCLUSIVE LICENSE AGREEMENT

THIS Amendment No.5 to Exclusive License Agreement ("Amendment 5") is made and entered into this 12th day of October, 2016 ("Effective Date of Amendment 5"), by and between the Mayo Foundation for Medical Education and Research ("Mayo") having its principal place of business at 200 First Street SW, Rochester, MN 55905, and Unity Biotechnology, Inc., a Delaware corporation, having a place of business at 3280 Bayshore Blvd, Brisbane CA 94005 ("Company"), for purposes of confirming the parties' intent and agreement as set forth herein.

BACKGROUND

WHEREAS, Mayo and Cenexys, Inc. are parties to that certain Exclusive License Agreement, with an effective date of the 28th day of June, 2013 ("Agreement"), along with the first, second, third and fourth Amendments to the Agreement.

WHEREAS, Company is the successor in interest to Cenexys, Inc.

WHEREAS, Mayo and Company have entered into a new exclusive license agreement of even date herewith (the "New License Agreement"), and in connection with the entry into such New License Agreement, Mayo and Company wish to amend the Agreement as set forth in this Amendment No. 5, and, accordingly, Mayo and Company agree as follows:

AMENDED TERMS

1. The following new definition is added as Section 1.29:

"New License Agreement" shall mean that certain Exclusive License Agreement entered into by Mayo and Company as of October 12th, 2016.

2. The following new sentence is added to the end of Section 3.2: "Notwithstanding the foregoing, annual minimum royalty payments made under the New License Agreement shall be fully creditable against annual minimum royalty payments due under this Section 3.2 and *vice versa*."

3. The following new Subsection (c) is added after Subsection 3.3(b) and the prior Subsection 3.3(c) is hereinafter re-labeled as new Subsection 3.3(d) and the prior Subsection 3.3(d) is hereinafter re-labeled as new Subsection new Subsection 3.3(e):

(c) Notwithstanding anything to the contrary in this Section 3.3, in the event that the achievement of a development milestone event set forth in Section 3.3(a) would trigger a development milestone payment under both this Section 3.3 and Section 3.3 of the New License Agreement, then Company shall only be obligated to pay a single development milestone payment with respect to the achievement of such development milestone event, which payment shall be the higher of the applicable development milestone payment in this Agreement and the applicable development milestone payment in the New License

Agreement for such development milestone event. For purposes of clarity, it is understood that payment of a development milestone payment with respect to such development milestone event under the New License Agreement shall satisfy in full Licensee's payment obligations under this Section 3.3 with respect to such development milestone event so long as such development milestone payment actually paid to Mayo exceeds (or equals) the development milestone payment that would have been due to Mayo under this Agreement. Notwithstanding the foregoing, at such time as development milestones 1, 2 and 3 in Section 3.3 of the New License Agreement have been paid with respect to two products (as defined in Section 3.3 of the New License Agreement), then no further payments will be owed with respect to Licensed Products achieving development milestones 1, 2 and 3 under this Section 3.3. Similarly, at such time as milestone 4 of the New License Agreement has been paid six times, then no further payment will be owed with respect to Licensed Products achieving development milestone 4 under this Section 3.3.

4. The last paragraph of Section 3.4 which reads:

The foregoing sales milestones shall be payable once for each of the first two products (Licensed Products or Buck Licensed Products) to achieve the applicable sales thresholds. For clarity, Company's total payment obligations under this Section 3.4 shall in no event exceed [***] U.S. Dollars ($[***]). Company agrees to promptly notify Mayo in writing of the occurrence of each of the foregoing milestones and the payment for such milestone shall be included with the royalty payment due for the calendar quarter in which such sales milestone was achieved.

is hereby relabeled as Subsection 3.4(e) and amended to read as follows:

(e) Certain Additional Terms.

(i) The foregoing sales milestones shall be payable once for each of the first two products (Licensed Products or Buck Licensed Products) to achieve the applicable sales thresholds. For clarity, Company's total payment obligations under this Section 3.4 shall in no event exceed [***] U.S. Dollars ($[***]). Company agrees to promptly notify Mayo in writing of the occurrence of each of the foregoing milestones and the payment for such milestone shall be included with the royalty payment due for the calendar quarter in which such sales milestone was achieved.

(ii) Notwithstanding anything to the contrary in this Section 3.4, in the event that the achievement of a sales milestone event set forth in this Section 3.4 would trigger a sales milestone payment under both this Section 3.4 and Section 3.4 of the New License Agreement, then Company shall only be obligated to pay a single sales milestone payment with respect to the achievement of such sales milestone event, which payment shall be the higher of the applicable sales milestone payment in this Agreement and the applicable sales milestone payment in the New License Agreement for such sales milestone event. For purposes of clarity, it is understood that payment of a sales milestone payment with respect to such sales milestone event under the New License Agreement shall satisfy in full Licensee's payment obligations under this Section 3.4 with respect to such sales milestone event so long as such sales milestone payment actually paid to Mayo exceeds (or equals)

the sales milestone payment that would have been due to Mayo under this Agreement. Notwithstanding the foregoing, at such time the sales milestones described in Section 3.4 of the New License Agreement have been paid with respect to the first two products (as defined in Section 3.4 of the New License Agreement) achieving the applicable sales thresholds, then no further payments will be owed under Section 3.4 of this Agreement with respect to subsequent Licensed Products achieving the applicable sales thresholds."

5. Section 3.6(b) which reads:

(b) Single Royalty; Non-Royalty Sales. In the event that a Licensed Product or Buck Licensed Product would be subject to two or more of the royalty provisions in Sections 3.5 above (e.g., in the event a Licensed Product or Buck Licensed Product is covered by multiple Valid Claims, some of which are composition of matter claims and some of which are not), only a single royalty shall be paid to Mayo with respect to such Licensed Product or Buck Licensed Product, that royalty being the highest of the royalties applicable to such Licensed Product or Buck Licensed Product. It is understood that royalties under Section 3.5(c) shall only be payable with respect to Licensed Products or Buck Licensed Products whose sale would infringe a Valid Claim of the Licensed Patents or Buck Licensed Patents covering the composition of matter of such Licensed Product or Buck Licensed Product in the country for which such Licensed Product or Buck Licensed Product is sold. In no event shall more than one royalty be due hereunder with respect to any Licensed Product (or Buck Licensed Product) unit; nor shall a royalty be payable under this Article 3 with respect to sales of Licensed Products or Buck Licensed Products at cost for use in research and/or development, in clinical trials or as samples.

is hereby amended to read as follows;

(b) Single Royalty; Non-Royalty Sales.

(i) In the event that a Licensed Product or Buck Licensed Product would be subject to two or more of the royalty provisions in Sections 3.5 above (e.g., in the event a Licensed Product or Buck Licensed Product is covered by multiple Valid Claims, some of which are composition of matter claims and some of which are not), only a single royalty shall be paid to Mayo with respect to such Licensed Product or Buck Licensed Product, that royalty being the highest of the royalties applicable to such Licensed Product or Buck Licensed Product.

(ii) In the event that the sale of a particular Licensed Product that is subject to a running royalty obligation under Section 3.5 above is also subject to a running royalty under Section 3.5 of the New License Agreement, Company shall only be obligated to pay a single royalty with respect to the sale of such Licensed Product, which royalty shall be the higher of the applicable royalty in this Agreement and the applicable royalty in the New License Agreement for such particular Licensed Product. For purposes of clarity, it is understood that payment of a royalty with respect to the sale of a particular Licensed Product under the New License

Agreement shall satisfy in full Licensee's royalty obligations under Section 3.5 with respect to such Licensed Product so long as such royalty actually paid to Mayo exceeds (or equals) the royalty that would have been due to Mayo under this Agreement.

(iii) It is understood that royalties under Section 3.5(c) shall only be payable with respect to Licensed Products or Buck Licensed Products whose sale would infringe a Valid Claim of the Licensed Patents or Buck Licensed Patents covering the composition of matter of such Licensed Product or Buck Licensed Product in the country for which such Licensed Product or Buck Licensed Product is sold. In no event shall more than one royalty be due hereunder with respect to any Licensed Product (or Buck Licensed Product) unit; nor shall a royalty be payable under this Article 3 with respect to sales of Licensed Products or Buck Licensed Products at cost for use in research and/or development, in clinical trials or as samples.

6. The following new Subsection (ii) is added after Subsection 3.7(b)(i) and the prior Subsection 3.7(b)(ii) is hereinafter re-labeled as new Subsection 3.6(b)(iii):

(ii) in the event (A) Company grants a sublicense under the rights licensed to it pursuant to this Agreement as well as under the rights licensed to it pursuant to the New License Agreement, and (B) Net Sublicensing Income received under this Agreement is subject to a payment obligation under this Section 3.7 as well as Section 3.7 of the New License Agreement, Company shall only be subject to a single payment obligation with respect to such Net Sublicensing Income, which payment obligation shall be the higher of the payment obligation applicable to such Sublicense Revenue under this Section 3.7 and under Section 3.7 of New License Agreement. For purposes of clarity, it is understood that any amounts paid by Company to Mayo with respect to any given Net Sublicensing Income under the New License Agreement shall satisfy in full Company's payment obligations under this Section 3.7 with respect to such Net Sublicensing Income so long as the amount actually paid to Mayo exceeds (or equals) the amount that would have been due to Mayo under this Section 3.7; and

All other terms of the Agreement and the first Amendment shall remain in full force and effect for the term of the Agreement and as set forth in the Agreement.

IN WITNESS WHEREOF, Mayo and Company hereby enter into this Amendment [No. 3], effective as of the date first set forth above.

Unity Biotechnology, Inc.	**Mayo Foundation for Medical Education and Research**
By:/s/ Nathaniel David Printed Name: Nathaniel David	By: /s/ Daniel D. Estes Printed Name: Daniel D. Estes

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit 10.20

AMENDED AND RESTATED EXCLUSIVE LICENSE AGREEMENT

This Amended and Restated License Agreement ("Agreement") is made as of the 27th day of January, 2017 (the "Signature Date") by and between the Buck Institute for Research on Aging, a California non-profit public benefit corporation having its principal place of business at 8001 Redwood Boulevard, Novato, California 94945 ("Buck"), and Unity Biotechnology, Inc., a Delaware corporation, having a place of business at 3280 Brisbane Blvd, Brisbane, California 94005 ("Sponsor").

BACKGROUND

A. Sponsor's predecessor, Cenexys, Inc. ("Cenexys") and Buck previously entered into that certain License Agreement dated February 3, 2014 (the "Prior License Agreement") pursuant to which Buck granted to Cenexys an exclusive license to certain "Patent Rights" and "Know-How" (all as defined in the Prior License Agreement).

B. Buck and Cenexys have also previously entered into a Sponsored Research Agreement, effective as of August 21, 2014, pursuant to which Sponsor funded certain research conducted in the laboratory of Dr. Judith Campisi ("Campisi") at Buck (the "Campisi Research Agreement") in exchange for an option to include within the Prior License Agreement inventions arising from such funded research.

C. Cenexys entered into a similar licensing and funded research arrangement with the Mayo Foundation for Medical Education and Research ("Mayo"), executing an Exclusive License Agreement with Mayo effective June 28, 2013, and a sponsored research agreement with Mayo effective September 25, 2014 (the "Mayo Research Agreement");

D. Sponsor now desires to fund research in the laboratory of Buck faculty member Dr. Simon Melov ("Melov") and in furtherance of this objective Sponsor and Buck have entered into a Sponsored Research Agreement of even date herewith (the "Melov Research Agreement");

E. In connection with their entry into the Melov Research Agreement, Sponsor and Buck desire to amend and restate the Prior License Agreement to provide for the inclusion within the licenses granted thereunder rights to inventions with respect to which Sponsor has exercised its option under Section 7.6.1 of the Melov Research Agreement;

F. The research conducted by Mayo under the Mayo Research Agreement and by Buck under the Campisi Research Agreement and Melov Research Agreement (collectively, "Buck Research Agreements") is collaborative, such that information and results generated by each of Mayo and Buck may be shared with each of Buck and Mayo, and Mayo may be provided with access to the Know-How; and

G. Because of the collaborative nature of the research, Sponsor has agreed that Buck will share in revenues resulting from Know-How Products and Patent Products (each as defined below), including Know-How Products and Patent Products that have been identified or developed by Mayo instead of by Buck.

NOW, THEREFORE, in consideration of the mutual covenants and promises herein contained, the parties hereto agree as follows:

ARTICLE 1
DEFINITIONS

As used in this Agreement, the following capitalized terms shall have the meanings indicated:

1.1 "Additional Inventions" shall mean discoveries and inventions that (i) are developed in the laboratory of Dr. Judith Campisi at Buck during the IP Capture Period, and (ii) are necessary or reasonably useful for the development, manufacture or commercialization of Licensed Products within the Field, excluding inventions generated pursuant to the Campisi Research Agreement and subject to the terms thereof.

1.2 "Affiliate" shall mean any entity which controls, is controlled by or is under common control with Sponsor. An entity shall be regarded as in control of another entity for purposes of this definition if it owns or controls more than fifty percent (50%) of the shares of the subject entity entitled to vote in the election of directors (or, in the case of an entity that is not a corporation, for the election of the corresponding managing authority).

1.3 "Commercially Reasonable Efforts" means those efforts and diligence (including with respect to the allocation of resources and personnel) consistent with the reasonable efforts and diligence that would be typically exerted by a biotechnology or pharmaceutical company in a similar circumstance in pursuing the research, development, and commercialization of products of similar nature and comparable market potential.

1.4 "Effective Date" shall mean February 3, 2014.

1.5 "EMA" shall mean the European Medicines Agency or any successor agency thereto.

1.6 "FDA" shall mean the United States Food and Drug Administration or any successor agency thereto.

1.7 "Field" shall mean (a) the prophylaxis, treatment, modulation or palliation of diseases or conditions through (i) the clearance or killing of senescent cells, or (ii) the inhibition or modulation of the deleterious effects of senescent cells, and (b) the prediction, diagnosis, monitoring and tracking of diseases or conditions being prevented, treated, modulated or inhibited pursuant to subsection (a) above.

1.8 "First Commercial Sale" means, with respect to a Licensed Product, the first sale of such product by Sponsor, its Affiliates or its Sublicensees to a third party following approval of an MAA by the applicable Regulatory Authority in the country or territory of sale.

1.9 "GAAP" shall mean the conventions, rules and procedures that define accounting practices as established, and revised or amended, by the Financial Accounting Standards Board and the U.S. Securities Exchange Commission.

1.10 "IP Capture Period" shall mean the period commencing on [***] and continuing until [***].

1.11 "Know-How" shall mean all technical information, know-how, processes, procedures, compositions, methods, techniques, or data that has been generated (a) by Buck personnel in the Campisi laboratory prior to the Effective Date ("Existing Know-How"), (b) by Buck personnel in the Campisi laboratory and/or the Melov laboratory during and in the course of performing research activities under the Buck Research Agreements ("Research Agreement Know-How") or (c) otherwise by Buck personnel in the Campisi laboratory during the IP Capture Period ("Additional Know-How"), in each case that are necessary for the development or commercialization of Licensed Products. For the avoidance of doubt, Know-How does not include any information, know-how, processes, procedures, methods, techniques, or data that has been or is generated by any personnel of Buck outside of the Campisi and Melov laboratories at Buck.

1.12 "Know-How Product" shall mean any Licensed Product that (a) incorporates Know-How or whose discovery or use was enabled by Sponsor's use of Know-How, or (b) meets the definition of "Know-How Product" under the Mayo License as the same exists as of the Effective Date, and in each case is not a Patent Product.

1.13 "Licensed Product" shall mean a product, composition or material for use in the Field.

1.14 "Licensed Subject Matter" shall mean the Patent Rights and the Know-How.

1.15 "Mayo Patent Rights" shall mean all patent applications and patents including, without limitation, all divisions, continuations, continuations-in-part, patents of addition, and substitutions, registrations, reissues, reexaminations or extensions of any kind with respect to any of the foregoing patent applications and patents, that are licensed to Sponsor or Sponsor's Affiliates by Mayo under the Mayo License Agreement.

1.16 "MAA" (Marketing Approval Application) shall mean a new drug application filed with the FDA as more fully defined in 21 C.F.R. §314.50 et. seq., or similar application or submission filed with or submitted to any Regulatory Authority to obtain permission to initiate marketing and sales of a Know-How Product or Patent Product for a particular indication. An MAA shall be deemed to be "accepted" if it has been accepted for substantive review by the FDA or other applicable Regulatory Authority.

1.17 "MHLW" means Japan's Ministry of Health, Labor and Welfare (also known as "Korosho") or any successor agency thereto.

1.18 "Net Sales" shall mean the total amount invoiced to third parties (or, in the absence of an invoice, received by Sponsor) on sales of Royalty Products by Sponsor, its Affiliates, or Sublicensees, for which royalties are due under Article 3 below, less the following reasonable and customary deductions actually given: (i) all trade, cash and quantity credits, discounts, refunds or government rebates; (ii) amounts for claims, allowances or credits for returns, retroactive price reductions, or chargebacks; (iii) packaging, handling fees and prepaid freight, sales taxes, duties and other governmental charges (including value added tax), shown on

the face of the invoice; and (iv) provisions for uncollectible accounts determined in accordance with GAAP, consistently applied to all products of the selling party, provided that in no event shall deductions for uncollectible accounts in any annual period exceed [***] percent ([***]%) of the cumulative Net Sales in such annual period. In the event that Sponsor and a third party enter into a barter transaction pursuant to which Sponsor transfers Royalty Products to such third party in exchange for non-cash consideration provided in lieu of cash, then Net Sales shall be calculated based on the fair market value of the non-cash consideration received, provided that in no event shall the transferred Royalty Products be valued at more than the then-current customary sales price for such Royalty Products invoiced to third parties or fair market value if there are no current invoices to third parties. For the removal of doubt, Net Sales shall not include sales by Sponsor to its Affiliates for resale, provided that if Sponsor transfers a Royalty Product to an Affiliate, and the Affiliate retransfers such Royalty Product to a third-party purchaser, then Net Sales shall be the price charged by the Affiliate to the third-party purchaser, less documented allowable deductions.

1.19 "Net Sublicensing Income" shall mean gross cash revenues (or the fair market value of any other consideration received in lieu of a cash payment, including, without limitation, securities, materials and equipment) received by Sponsor or its Affiliates from a Sublicensee in consideration of the grant to such Sublicensee of a sublicense under any of the Licensed Subject Matter, but excluding earned royalties and any other share of net sales (including revenue sharing and profit payments). Net Sublicensing Income shall include without limitation any license signing fee, license maintenance fee, minimum royalty payments (but only to the extent not credited against royalties due on Sublicensee's sales of Royalty Products) or milestone payment, and any consideration received for an investment in equity (and conditional equity, such as warrants, convertible debt) of Sponsor to the extent such consideration exceeds the fair market value of such equity or other conditional equity. Not included in the definition of Net Sublicensing Income is income received by Sponsor or its Affiliates: (a) as *bona fide* loans; (b) from equity investments (and conditional equity, such as warrants, convertible debt) in Sponsor at market value; (c) as reimbursements for actual documented patent prosecution costs and patent maintenance expenses; (d) as payment or reimbursement for research and development and/or other services conducted by or for Sponsor, including costs of materials, equipment, manufacturing services or clinical testing, e.g., provided on the basis of full-time equivalent ("FTE") efforts of personnel at or below commercially reasonable and standard FTE rates ("FTE Reimbursements") and/or the reimbursement of out-of-pocket expenses; and (e) income to Sponsor from a Sublicensee for commercial manufacturing of goods if such goods are intended for resale to third parties and the revenue derived from sales of such goods will be treated as Net Sales and subject to an earned royalty due to Buck. In addition, Sponsor shall have the right to deduct from Net Sublicensing Income withholding taxes and other taxes, duties and similar amounts owing with respect to payments included within Net Sublicensing Income, but excluding what are commonly referred to as income taxes.

1.20 "Patent Product" shall mean a Licensed Product (a)(i) the manufacture, sale or use of which would but for the license granted herein, infringe a Valid Claim of the Patent Rights, or (ii) whose discovery or development was enabled by the use of a Proprietary Research Tool (a "Tool Product"), or (b) that meets the definition of "Patent Product" under the Mayo License as the same exists as of the Effective Date.

1.21 "Patent Rights" shall mean any and all rights in and to:

(a) all patents and patent applications listed in Exhibit A hereto together with any other patents and patent applications developed in the laboratory of Dr. Judith Campisi at Buck that are owned or controlled by Buck as of the Effective Date and that claim inventions claimed or disclosed in the patent(s) and patent application(s) on Exhibit A (collectively, the "Existing Patents"); and

(b) all patents and patent applications claiming inventions developed pursuant to Campisi Research Agreement for which Sponsor exercises its option thereunder ("Campisi Research Agreement Patents"); and

(c) all patents and patent applications claiming inventions developed pursuant to Melov Research Agreement for which Sponsor exercises its option under Section 7.6.2 thereof ("Melov Research Agreement Patents"); and

(d) all patents and patent applications claiming Additional Inventions with respect to which Sponsor exercised its option pursuant to Section 2.2 ("Additional Invention Patents"); and

(e) all divisions, continuations, continuations-in-part (to the extent entitled to the priority date of any of the Existing Patents, Research Agreement Patents, or Additional Invention Patents), patents of addition, and substitutions of the Existing Patents or Research Agreement Patents, or Additional Invention Patents together with all registrations, reissues, reexaminations or extensions of any kind with respect to any of the foregoing patents; and

(f) all counterparts, including supplemental protection certificates, to any of the Existing Patents, Research Agreement Patents, or Additional Invention Patents issued by or filed in any country or jurisdiction other than the United States.

In the event that Buck and Sponsor are joint owners of an invention by reason of the fact that personnel of both Buck and Sponsor are joint inventors of such invention, it is understood that the Patent Rights include only Buck's rights as a joint owner of the patent applications and patents that claim such joint invention.

1.22 "Phase I Clinical Study" shall mean any study in humans the principal purpose of which is preliminary determination of safety in healthy individuals or patients as described under 21 C.F.R. §312.21(a) with respect to the United States, or, with respect to a jurisdiction other than the United States, a similar clinical study, in each case which shall be deemed commenced when the first participant in such study has received his or her initial dose of a Licensed Product.

1.23 "Phase II Clinical Study" shall mean a preliminary efficacy and dose ranging human clinical study of a Licensed Product in the target patient population, as described under 21 C.F.R. §312.21(b) with respect to the United States, or, with respect to a jurisdiction other than the United States, a similar clinical study, in each case which shall be deemed commenced when the first subject in such study has received his or her initial dose of such Licensed Product.

1.24 "Phase III Clinical Study" shall mean a human clinical study designed as a pivotal study to confirm with statistical significance the efficacy and safety of a Licensed Product with respect to a given indication, which study is performed for purposes of filing an MAA for such Product for such indication as described under 21 C.F.R. §312.21(c) with respect to the United States, or, with respect to a jurisdiction other than the United States, a similar clinical study, in each case which shall be deemed commenced when the first subject in such study has received his or her initial dose of such Licensed Product.

1.25 "Proprietary Research Tool" shall mean (a) a Research Tool existing as of the Effective Date and listed on Exhibit C, and (b) any future Research Tool used to discover or develop Patent Products and which Sponsor elects to designate as a Proprietary Research Tool pursuant to Section 2.4.

1.26 "Proprietary Research Tool Patents" shall mean the Patent Rights claiming the Proprietary Research Tools. A list of the Proprietary Research Tool Patents existing as of the Effective Date and organized by the Proprietary Research Tool which they cover, is attached hereto as Exhibit C.

1.27 "Regulatory Authority" means a federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the discovery, development, commercialization or other use or exploitation (including review and approval of MAAs) of pharmaceutical products in any jurisdiction, including the FDA, EMA, and the MHLW.

1.28 "Research Agreement Patents" means the Campisi Research Agreement Patents and the Melov Research Agreement Patents.

1.29 "Research Tool" means animal models (e.g., a transgenic mouse), cell lines, monoclonal antibodies, research assays and reagents, cloning tools, and similar materials whose primary utility is in the conduct of basic scientific research.

1.30 "Research Tool Patent Claim" shall mean a claim of a Research Agreement Patent or Additional Invention Patent that claims a Research Tool that has not been designated as a Proprietary Research Tool by Sponsor pursuant to Section 2.4.

1.31 "Royalty Product" shall mean a Patent Product or a Know-How Product

1.32 "Sublicensee" shall mean any non-Affiliate third party to whom Sponsor has granted the right to promote, market and sell Royalty Products pursuant to Section 2.3, and "Sublicense" shall mean an agreement or arrangement between Sponsor and a Sublicensee granting such rights. As used in this Agreement, "Sublicensee" shall not include (i) wholesalers or (ii) any resellers of Royalty Product(s) that do not market and promote such Royalty Product(s).

1.33 "Valid Claim" shall mean a claim of an issued and unexpired patent or a claim of a pending patent application which has not been held unpatentable, invalid or unenforceable by a court or other government agency of competent jurisdiction and has not been admitted to be invalid or unenforceable through reissue, re-examination, disclaimer or otherwise; provided,

however, that if the holding of such court or agency is later reversed by a court or agency with overriding authority, the claim shall be reinstated as a Valid Claim with respect to Net Sales made after the date of such reversal. Notwithstanding the foregoing provisions of this Section 1.33, if a claim of a pending patent application within the Patent Rights has not issued as a claim of an issued patent within the Patent Rights, within seven (7) years after the filing date from which such claim takes priority, such pending claim shall not be a Valid Claim for purposes of this Agreement.

ARTICLE 2
LICENSE

2.1 License Grants.

(a) Subject to the terms and conditions of this Agreement, including Sections 2.2, 2.5 and 2.6 below, Buck hereby grants to Sponsor a worldwide, royalty-bearing, exclusive license, with the right to sublicense solely in accordance with Section 2.3, under the Patent Rights (excluding the Research Tool Patent Claims), the Research Agreement Know-How and the Proprietary Research Tools to: (i) develop, make, use, sell, import, export or otherwise distribute Royalty Products, and (ii) practice any method, process or procedure covered or claimed by such Patent Rights or included in the Research Agreement Know-How, including the use of Proprietary Research Tools to discover Royalty Products, in each case solely within the Field.

(b) Subject to the terms and conditions of this Agreement, Buck hereby grants to Sponsor a worldwide, royalty-bearing, non-exclusive license, with the right to sublicense solely in accordance with Section 2.3, under the Research Tool Patent Claims, the Existing Know-How and the Additional Know-How solely to (i) develop, make, use, sell, import, export or otherwise distribute Royalty Products, and (ii) practice any method, process or procedure included in the Research Tool Patent Claims, the Existing Know-How and the Additional Know-How, in each case solely within the Field.

2.2 Option to Additional Inventions.

(a) Subject to the terms of this Section 2.2, Sponsor shall have an option to include within the license granted to Sponsor under Section 2.1 above, all worldwide patent rights owned or controlled by Buck with respect to Additional Inventions, in each case provided that the inclusion of such rights within the license granted to Sponsor under Section 2.1 above would not (in the reasoned legal opinion of Buck's legal counsel) result in (i) a violation of the terms of any pre-existing written agreement between Buck and any third party, or (ii) the loss of Buck's ability to issue or maintain tax-exempt bonds under the 1986 Tax Reform Act.

(b) Buck shall notify Sponsor promptly in writing of all Additional Inventions and shall provide Sponsor with a suitable description and other information reasonably requested by Sponsor for the purpose of evaluating such Additional Inventions for purposes of its option (such notice and accompanying information, an "Invention Disclosure").

(c) To exercise its option with respect to a particular Additional Invention, Sponsor shall so notify Buck within ninety (90) days after receiving from Buck a reasonably

complete Invention Disclosure of its option exercise for such invention. Following such exercise, all patent applications and/or patents owned or controlled by Buck directed to such invention shall, to extent such rights are not ineligible (pursuant to Section 2.2(a)(i) or (ii) above) for inclusion within the license granted to Sponsor under Section 2.1, be deemed included within the Patent Rights.

(d) In the event that a question arises as to whether a particular discovery or invention is necessary or reasonably useful for the development, manufacture or commercialization of Licensed Products within the Field, the Parties agree that the Buck Head of Business Development shall have the right to make the final decision on such matter, and in the event that the Buck Head of Business Development determines that such discovery or invention is not in fact necessary or reasonably useful for the development, manufacture or commercialization of Licensed Products within the Field, such discovery or invention shall not be considered an "Additional Invention" and shall not be subject to Sponsor's option under this Section 2.2.

2.3 Sublicenses. Sponsor may grant and authorize sublicenses within the scope of the license granted to Sponsor pursuant to this Agreement, provided that: (i) Sponsor promptly discloses to Buck the identity of the Sublicensee and delivers a true and correct copy of each sublicense granted by Sponsor as permitted herein, and any modification or termination thereof, within thirty (30) days after execution, modification, or termination (which copy may only be redacted to delete information not relevant to determining whether such sublicense is consistent with the provisions of this Agreement); (ii) Sponsor ensures that all sublicenses granted by Sponsor hereunder are consistent with the terms and conditions of this Agreement and include provisions substantially identical to Sections 2.5 and 2.6, and Articles 10 and 11 with the Sublicensee in place of Sponsor; and (iii) Sponsor is responsible for the activities of such Sublicensees with respect to the Licensed Subject Matter and the Licensed Products as if the activities were carried out by Sponsor, including the payment of royalties due to Buck hereunder, whether or not such amounts are paid to Sponsor by a Sublicensee.

2.4 Designation of Additional Proprietary Research Tools.

(a) Sponsor shall have the right upon written notice to Buck to designate any Research Tool arising under the Buck Research Agreements, or subject to Section 2.2, an Additional Invention that is a Research Tool, as a Proprietary Research Tool, in which case all patents and patent applications owned or controlled by Buck and directed to such Research Tool shall thereafter be deemed Proprietary Research Tool Patents and such Research Tool, together with all patents and patent applications directed thereto, shall be exclusively licensed to Sponsor.

(b) To exercise its option to designate a particular Research Tool as a Proprietary Research Tool, Sponsor shall provide Buck with written notice of such election at the time it exercises its option under the Campisi Research Agreement, Melov Research Agreement or Section 2.2 above, as applicable, to include such Research Tool within the licenses granted to Sponsor under Section 2.1 above.

2.5 Retained Rights. Buck hereby retains a non-exclusive, non-transferrable right under the Patent Rights to (a) use and practice the Patent Rights for its own educational and

non-commercial research purposes; and (b) perform its research activities under the Buck Research Agreements.

2.6 Governmental Rights. The parties understand that the Licensed Subject Matter may have been developed under a funding agreement with the Government of the United States and, if so, that the Government may have certain rights relative thereto under 35 U.S.C. §§ 200 *et seq.* Buck represents and warrants that it (i) has complied and agrees to continue to comply during the term of this Agreement with all laws and regulations applicable to such a Government funding agreement and (ii) has done and will continue to do all acts necessary for the protection of Buck's rights to retain ownership of all inventions within the Licensed Subject Matter, including disclosing subject inventions to the Government and electing to retain title in subject inventions.

2.7 No Implied Licenses. Nothing herein shall be construed as granting Sponsor, by implication, estoppel or otherwise, any license or other right to any intellectual property of Buck other than the Licensed Subject Matter or to grant to Sponsor any right or license other than those expressly granted herein.

2.8 Covenant. Sponsor covenants that it will not use or practice the Licensed Subject Matter except for the purposes expressly permitted in the applicable license grant in this Article 2.

ARTICLE 3
PAYMENTS AND REPORTS

3.1 Equity. In consideration for the rights and licenses granted by Buck to Sponsor herein, Sponsor shall, within thirty (30) days of the Effective Date and subject to Buck's execution and delivery to Sponsor of a Stock Purchase Agreement in substantially the form attached hereto as Exhibit B, issue to Buck Three Hundred Ninety Thousand (390,000) shares of Sponsor Common Stock promptly following the Effective Date.

3.2 Minimum Annual Royalty Payments. As further consideration for the rights and licenses granted by Buck to Sponsor herein, Sponsor shall pay to Buck an annual minimum royalty of [***] U.S. Dollars ($[***]). The first annual minimum royalty payment shall be due within thirty (30) days of the fourth (4th) anniversary of the Effective Date, with subsequent annual minimum royalty payments being due within thirty (30) days of each subsequent anniversary of the Effective Date until the expiration (or, if applicable, the earlier termination) of this Agreement. Annual minimum royalty payments shall be non-refundable but shall be creditable against milestones owed under Section 3.3, running royalties accrued under Section 3.5 and sublicensing fees owed under Section 3.7, in each case that have been accrued and paid during the preceding one (1) year period.

3.3 Development Milestone Payments.

(a) In consideration for the rights and licenses granted by Buck to Sponsor herein, Sponsor agrees to pay to Buck the following payments upon the occurrence of each milestone specified below:

Development Milestone Event	Development Milestone Payment
1.Commencement of a Phase I Clinical Study for a Royalty Product	$[***]
2.Commencement of a Phase II Clinical Study for a Royalty Product	$[***]
3.Commencement of a Phase III Clinical Study for a Royalty Product	$[***]
4.Acceptance of filing of an MAA by the FDA, EMA, or MHLW for a Royalty Product	$[***]

(b) Development milestones 1-3 as set forth in Section 3.3(a) shall be payable once each for the first two (2) Royalty Products to achieve the applicable milestone event. Milestone 4 shall be payable up to three (3) times for each of the first two (2) Royalty Products (i.e., once per MAA filed and accepted for review by the Regulatory Authority in each of the first three distinct jurisdictions in which an MAA is filed), for an aggregate of up to six (6) payments total. For clarity, Sponsor's total payment obligations under this Section 3.3 shall in no event exceed [***] U.S. Dollars ($[***]) (i.e., up to an aggregate total of $[***] under development milestones 1-3 and up to an aggregate total of $[***] under development milestone 4).

(c) Sponsor agrees to promptly notify Buck in writing of the occurrence of each of the foregoing milestones and the payment for such milestone shall be due within thirty (30) days of occurrence thereof. All development milestone payments shall be non-refundable and non-creditable, and shall be payable in addition to the sales milestones, royalties and other payments due under this Agreement. If, for whatever reason, a particular development milestone for which a milestone payment is due is not achieved then, in such case, the milestone payment that Buck would have received upon the occurrence of such milestone event for the applicable Royalty Product had the particular development milestone event been achieved shall be paid on the occurrence of the next development milestone event for which a milestone payment is due for such Royalty Product, which payment shall be paid in addition to, and not instead of, the milestone payment that is to be paid to Buck upon the occurrence of the next development milestone event.

3.4 Sales Milestones. In further consideration of the rights and licenses granted by Buck to Sponsor herein, Sponsor shall pay Buck the following milestone payments upon achievement of the corresponding sales milestones:

(a) Upon first achieving aggregate Net Sales of a Royalty Product equal to or exceeding [***] U.S. Dollars ($[***]), Sponsor shall pay Buck [***] U.S. Dollars ($[***]);

(b) Upon first achieving aggregate Net Sales of a Royalty Product equal to or exceedin g [***] U.S. Dollars ($[***]), Sponsor shall pay Buck [***] U.S. Dollars ($[***]);

(c) Upon first achieving aggregate Net Sales of a Royalty Product equal to or exceeding [***] U.S. Dollars ($[***]), Sponsor shall pay Buck [***] U.S. Dollars ($[***]);

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

(d) Upon first achieving aggregate Net Sales of a Royalty Product equal to or exceeding [***] U.S. Dollars ($[***]), Sponsor shall pay Buck [***] U.S. Dollars ($[***]).

The foregoing sales milestones shall be payable once for each of the first two Royalty Products to achieve the applicable sales thresholds. For clarity, Sponsor's total payment obligations under this Section 3.4 shall in no event exceed [***] U.S. Dollars ($[***]). Sponsor agrees to promptly notify Buck in writing of the occurrence of each of the foregoing milestones and the payment for such milestone shall be included with the royalty payment due for the calendar quarter in which such sales milestone was achieved. All sales milestone payments shall be non-refundable and non-creditable, and shall be payable in addition to the development milestones, royalties and other payments due under this Agreement.

3.5 Earned Royalty. As additional consideration of the rights and licenses granted by Buck to Sponsor herein, except as otherwise provided in this Article 3, Sponsor agrees to pay to Buck as running royalties a percentage of Net Sales as follows:

(a) For Know-How Products: [***]% of annual Net Sales of Know-How Products;

(b) For Patent Products for which there are no Valid Claims within the Patent Rights or the Mayo Patent Rights covering the composition of matter of the applicable Patent Product:

Annual Net Sales of Patent Product	Applicable Royalty Rate
Portion of worldwide annual Net Sales of such Patent Products less than or equal to [***] Dollars (US$[***])	[***]%
Portion of worldwide annual Net Sales of such Patent Products over [***] Dollars (US$[***])	[***]%

(c) For Patent Products for which there is at least one Valid Claim within the Patent Rights or the Mayo Patent Rights covering the composition of matter of the applicable Patent Product:

Annual Net Sales of Patent Product	Applicable Royalty Rate
Portion of worldwide annual Net Sales of such Patent Products less than or equal to [***] Dollars (US$[***])	[***]%
Portion of worldwide annual Net Sales of such Patent Products over [***] Dollars (US$[***])	[***]%

3.6 Certain Additional Terms.

(a) Royalty Term.

(i) Buck's right to receive royalties under Section 3.5(c) above shall expire on a product-by-product and country-by-country basis upon the expiration of the last to

expire Valid Claim in the Patent Rights or the Mayo Patent Rights covering the composition of matter of such Patent Product in such country. Thereafter, if there is also at least one Valid Claim within the Patent Rights or the Mayo Patent Rights covering the method of making or method of using the Licensed Product in such country and such Valid Claim is still in effect on the date on which the last-to-expire composition of matter claim expires in such country, Sponsor will pay royalties on such Licensed Product at the royalty rate applicable for Patent Products under Section 3.5(b) above until the date of expiration of the last-to-expire Valid Claim in the Patent Rights or the Mayo Patent Rights covering the method of making or method of using such Licensed Product in such country. If the last-to-expire Valid Claim in the Patent Rights or the Mayo Patent Rights covering the method of making or method of using such Licensed Product in such country expires prior to the earlier of (A) the 13th anniversary of the First Commercial Sale of the first Royalty Product anywhere in the world or (B) January 1, 2037, then to the extent that such Licensed Product satisfies the definition of a Know-How Product, Sponsor will, as of the date on which such claim expires, continue to pay royalties on such Licensed Product at the royalty rate under Section 3.5(a) until the earlier of (A) the 13th anniversary of the First Commercial Sale of the first Royalty Product anywhere in the world or (B) January 1, 2037. If there is no unexpired Valid Claim within the Patent Rights or the Mayo Patent Rights covering the method of making or method of using the Licensed Product as of the date of the last-to-expire composition of matter claim expires in such country, then to the extent that such Licensed Product satisfies the definition of a Know-How Product, Sponsor will to pay royalties on such Licensed Product at the royalty rate under Section 3.5(a) until the earlier of (1) the 13th anniversary of the First Commercial Sale of the first Royalty Product anywhere in the world or (2) January 1, 2037.

(ii) Buck's right to receive royalties under Section 3.5(b) above shall expire on a product-by-product and country-by-country basis upon the expiration of the last to expire Valid Claim in the Patent Rights or the Mayo Patent Rights covering such Patent Product in such country, provided that with respect to any Patent Product that is a Tool Product, Buck shall be entitled to continue to receive a royalty under Section 3.5(b) with respect to worldwide sales of such Patent Product until the expiration of the last to expire Valid Claim of the Proprietary Research Tool Patent(s) covering the Proprietary Research Tool(s) whose use enabled the discovery or development of such Patent Product. However, if Buck's right to receive royalties under the preceding sentence expires prior to the earlier of (A) the 13th anniversary of the First Commercial Sale of the first Royalty Product anywhere in the world or (B) January 1, 2037, then to the extent that such Licensed Product satisfies the definition of a Know-How Product, Sponsor will, as of the date on which the last-to-expire Valid Claim covering such Patent Product in such country expires or, if applicable and if in effect longer than the last-to-expire Valid Claim covering such Patent Product, the last-to-expire Valid Claim of the applicable Proprietary Research Tool Patent, continue to pay royalties on such Licensed Product at the royalty rate under Section 3.5(a) until the earlier of (1) the 13th anniversary of the First Commercial Sale of the first Royalty Product anywhere in the world or (2) January 1, 2037.

(iii) Buck's right to receive royalties under Section 3.5(a) above for a Know-How Product shall expire on the earlier of (A) thirteen (13) years after the First Commercial Sale of the first Royalty Product anywhere in the world or (B) January 1, 2037. For clarity, in the event that a Licensed Product is not covered in a country by a Valid Claim of the Patent Rights or the Mayo Patent Rights but does meet the definition of a Know-How Product,

then Buck's right to receive royalties under Section 3.5(a) above shall expire on the earlier of the thirteen (13) year anniversary of the First Commercial Sale of the first Royalty Product anywhere in the world or January 1, 2037.

(b) Products Developed Post-Termination; Products Developed Post-Acquisition. Notwithstanding anything to the contrary in this Agreement:

(i) in the event that Sponsor elects to permissively terminate this Agreement pursuant to Section 8.3, any product Discovered by or on behalf of Sponsor following the second anniversary of the effective date of such termination shall not be subject to the payment obligations set forth in Section 3.3-3.5 provided that Sponsor has complied with its obligations under Section 8.4(b)(i) regarding the return to Buck of all Confidential Information of Buck. For clarity, any product Discovered by or on behalf of Sponsor (A) prior to the second anniversary of the effective date of such termination, or (B) during any time period following the effective date of such termination in which Sponsor is not in compliance with its obligations under Section 8.4(b)(i), shall to the extent such product satisfies the definition of "Know-How Product" (i.e., is a product for use in the Field that incorporates Know-How or was discovered through Sponsor's use of Know-How), be subject to the payment obligations set forth in Section 3.3-3.5 as if such product were discovered during the Term;

(ii) in the event of an acquisition, merger or consolidation ("Acquisition") of Sponsor by or with a third party ("Acquirer"), no payments will be owed under Section 3.3, 3.4, 3.5 and 3.7 with respect to any products (A) owned or controlled by the Acquirer immediately prior to the effective date of such Acquisition, or (B) Discovered by Sponsor or such Acquirer following the date of such Acquisition. For clarity, the foregoing shall not limit Buck's rights to receive payments under Section 3.3, 3.4, 3.5 and 3.7 with respect to any product(s) Discovered by Buck during the performance of the Buck Research Agreements.

(iii) As used in this Section 3.6(b), a product will be deemed to have been "Discovered" upon the later of (A) the date the structure of the active pharmaceutical ingredient ("API") in such product is first determined, or (B) the date the activity of such API is first experimentally established in animal model by Sponsor, Buck or Mayo.

(c) Single Royalty; Non-Royalty Sales. In the event that a Licensed Product would be subject to two or more of the royalty provisions in Sections 3.5 above (e.g., in the event a Licensed Product is covered by multiple Valid Claims, some of which are composition of matter claims and some of which are not), only a single royalty shall be paid to Buck with respect to such Licensed Product, that royalty being the highest of the royalties applicable to such Licensed Product. It is understood that royalties under Section 3.5(c) shall only be payable with respect to Licensed Products whose sale would infringe a Valid Claim within the Patent Rights or the Mayo Patent Rights covering the composition of matter of such Licensed Product in the country for which such Licensed Product is sold. In no event shall more than one royalty be due hereunder with respect to any Licensed Product unit; nor shall a royalty be payable under this Article 3 with respect to sales of Licensed Products for use in research and/or development, in clinical trials or as samples.

(d) Multiple Royalties. If Sponsor, its Affiliate or Sublicensee is required to pay a non-Affiliate third party other than Mayo amounts with respect to a Licensed Product under agreements for patent rights or other technologies which Sponsor, its Affiliate or Sublicensee, in its best judgment, determines are necessary or desirable to license or acquire with respect to such Licensed Product, Sponsor may deduct such amount owing to such non-Affiliate third parties (prior to any reductions) from the royalty owing to Buck for the sale of such Licensed Product pursuant to Section 3.5 above. Notwithstanding the foregoing provisions of this Section 3.6, in no event shall the royalties due to Buck pursuant to Section 3.5 above be so reduced to less than:

(i) [***] percent ([***]%) of the amount that would otherwise be due to Buck with respect to Licensed Products subject to Sections 3.5(a) or 3.5(b); or

(ii) [***] percent ([***]%) of the amount that would otherwise be due to Buck with respect to Licensed Products subject to Section 3.5(c).

(e) Royalties on Mayo Licensed Products. Notwithstanding anything to the contrary in this Agreement, it is understood and agreed that any Licensed Product identified or developed solely by Mayo shall only be subject to milestone and royalty obligations under this Agreement if that product is subject to milestone and royalty obligations under the Mayo License Agreement as the same exists as of the Effective Date.

3.7 Sublicense Fees.

(a) Sponsor shall pay to Buck [***]% of the Net Sublicensing Income received by Sponsor or its Affiliates.

(b) Notwithstanding the foregoing:

(i) Sponsor shall only be obligated to pay to Buck [***] percent ([***]%) of that portion of the aggregate Net Sublicensing Income that exceeds the then current aggregate duly documented and verifiable amount spent by Sponsor on the development of Licensed Products as of the date such Net Sublicensing Income was received. For example, if Sponsor has spent $100,000 on the development of Licensed Products and receives $200,000 in Net Sublicensing Income, Sponsor shall only be obligated to pay to Buck $[***]; and

(ii) Sponsor's total payment obligations under this Section 3.7 shall be capped at [***] U.S. Dollars ($[***]).

3.8 Combination Products. In the event that a Licensed Product is sold in combination with another product, component or service for which no royalty would be due hereunder if sold separately (a "Combination Product"), Net Sales from such combination sales for purposes of calculating the amounts due under this Article 3 shall be determined based on the proportionate list prices of such products, components or services if sold separately. If a product, component or service that is part of the Combination Product sold is not sold separately, then the "Net Sales" for the purpose of determining the royalty due shall be determined by multiplying the Net Sales of the Combination Product by a fraction that reasonably represents the relative contribution, to the total market value of such Combination Product, of the Licensed Product, where such

fraction is determined by the parties in good faith on the basis of the fair market values of the contribution of each of the different products, components or services when included in the Combination Product.

3.9 Records. During the term of this Agreement, Sponsor and its Affiliates shall keep, and shall cause Sublicensees to keep, complete and accurate records of their Net Sales in sufficient detail to enable the amounts payable under this Article 3 to be determined. Sponsor will preserve, and will cause its Affiliates and Sublicensees to preserve, such records for at least three (3) years from the date of the payment to which they pertain. Upon Buck's written request, but not more frequently than once per calendar year, Sponsor shall permit representatives or agents of Buck to examine such records during Sponsor's regular business hours for the purpose of and to the extent necessary to verify any report required under this Agreement with respect to Net Sales received not more than three (3) years prior to the date of Buck's request. To the extent that Sponsor does not have the right to grant Buck the right to audit its Sublicensees' books and records hereunder, Sponsor shall obtain for itself such right and, at the request of Buck and at Buck's expense, Sponsor shall, through an independent third party acceptable to Buck, exercise such audit right with respect to Sublicensees and provide the results of such audit for inspection by Buck pursuant to this Section 3.9. In the event that the amounts due to Buck are determined to have been underpaid, Sponsor shall pay to Buck any amount due and unpaid, together with interest on such amount at the prime rate in effect at [***], or at the maximum rate permitted by law, whichever is lower, within thirty (30) days following the receipt of the audit results. Buck shall bear its own expenses in connection with any audits conducted by Buck's representatives or agents; provided, however, that if an error of more than [***] percent ([***]%) in favor of Sponsor or its Affiliates or Sublicensees is discovered, then such expenses shall be paid by Sponsor.

3.10 Reports. Beginning with the first accrual of Net Sales on which a royalty is due hereunder, Sponsor shall provide to Buck a quarterly royalty report as follows: Within sixty (60) days after the end of each calendar quarter, Sponsor shall deliver to Buck a true and accurate report, giving such particulars of the business conducted by Sponsor, its Affiliates and Sublicensees, if any, during such calendar quarter as are pertinent to account for royalties due under this Article 3. Such report shall include at least (i) the total of Net Sales during such quarter in sufficient detail on a Product-by Product and country-by-country basis to permit confirmation of the accuracy of the royalty payments due, including the number of Royalty Products sold, the gross sales of Royalty Products, and the deductions made from gross sales to determine Net Sales; (ii) the calculation of royalties; and (iii) the total royalties so calculated and due Buck. Simultaneously with the delivery of each such report, Sponsor shall pay to Buck the total royalties, if any, due to Buck for the period of such report. If no royalties are due, Sponsor shall so report. All information contained in reports provided to Buck under this Section 3.10, or learned by Buck under Section 3.9 above shall be Sponsor's Confidential Information.

3.11 Payments. All amounts payable hereunder by Sponsor shall be payable in United States Dollars. If any currency conversion of foreign currency sales into United States Dollars shall be required in connection with the payment of royalties hereunder, such conversion shall be made by using the exchange rates used by Sponsor in calculating Sponsor's own revenues for financial reporting purposes.

3.12 Exchange Control. If at any time legal restrictions prevent the prompt remittance of part or all of the royalties payable by Sponsor with respect to any country or territory where a Licensed Product is sold, Sponsor shall have the right, at its option, to make such payments by depositing the amount thereof in local currency to Buck's account in a bank or other depository in such country. If the royalty rate specified in this Agreement should exceed the permissible rate established in any country, the royalty rate for sales in such country shall be adjusted to the highest legally permissible or government-approved rate.

3.13 Late Payment. Any amounts not paid by Sponsor when due under this Agreement will be subject to interest from and including the date payment is due, up through and including the date upon which Buck has collected the funds in accordance herewith at a rate equal to the lesser of (i) the sum of [***] percent ([***]%) plus the prime rate of interest in effect at Bank of America NT&SA, San Francisco, California per annum, calculated daily, or (ii) the maximum interest rate allowed by law.

ARTICLE 4
DATA ACCESS

4.1 Promptly after the Effective Date, Buck shall, at Sponsor's request, provide to Sponsor all data, reports, analyses and other information in its possession or control that is within the Know-How. Subject to the provisions of Article 6 below, Sponsor will have the right to use all such data and materials for the purposes set forth in the license rights granted to it in Article 2, and to provide the same to third parties under obligations of confidentiality consistent with the obligations set forth in Article 6 and to Regulatory Authorities in connection with obtaining approvals to develop, market and/or commercialize Licensed Products. In addition, as reasonably requested by Sponsor from time to time, Buck shall deliver to Sponsor reasonable quantities of biological materials covered by the Licensed Subject Matter based on availability, provided that Sponsor shall bear Buck's costs of shipping such materials to Sponsor. Such materials shall be supplied to Sponsor by Buck on an "as is" basis under a material transfer agreement, the terms of which shall be substantially similar to the template material transfer agreement attached hereto as Exhibit D. Upon the termination of this Agreement, Sponsor shall, at Buck's option, either return to Buck any remaining biological materials provided to it by Buck hereunder or destroy such materials.

ARTICLE 5
DUE DILIGENCE

5.1 General Diligence Obligations. Sponsor shall use Commercially Reasonable Efforts to develop, file Marketing Authorization Applications for, commercialize and meet the market demand for one or more Royalty Products.

5.2 Failure. If Sponsor does not use Commercially Reasonable Efforts as provided for in Section 5.1, then Buck shall have the right to terminate this Agreement in its entirety for material breach in accordance with the procedures set forth in Section 8.2, or with the consent of Sponsor, to convert to non-exclusive, the license rights granted to Sponsor hereunder.

5.3 Reports. Within ninety (90) days following the end of each calendar year during the term of this Agreement, Sponsor shall prepare and deliver to Buck a written report which shall describe, in reasonable detail, the research performed during the previous year employing the Licensed Subject Matter or regarding Royalty Products, the progress of the development and exploitation of Licensed Subject Matter and Royalty Products during the previous year, and the research activities regarding the Licensed Subject Matter and Royalty Products planned for the current calendar year.

ARTICLE 6
CONFIDENTIALITY

6.1 Confidential Information. During the term of this Agreement and for a period of seven (7) years thereafter, and except as otherwise provided herein, each party shall maintain in confidence, and shall not use for any purpose or disclose to any third party, information of a confidential or proprietary nature that is disclosed by the other party that (a) if in written or other tangible form is marked "Confidential," "Proprietary" or in some other manner to indicate its confidential nature, or (b) that, given the nature of the information or the circumstances surrounding its disclosure, reasonably should be considered as confidential (collectively, "Confidential Information"). Confidential Information shall not include any information that is: (i) already known to the receiving party without obligations of confidentiality thereto at the time of disclosure hereunder as demonstrated by competent proof, or (ii) is or hereafter becomes publicly known other than through acts or omissions of the receiving party, or (iii) is disclosed to the receiving party without obligations of confidentiality by a third party under no obligation of confidentiality, whether direct or indirect, to the disclosing party, or (iv) is independently developed by the receiving party without reliance on or reference to the Confidential Information of the disclosing party, as demonstrated by competent proof. The party receiving a disclosing party's Confidential Information shall maintain such Confidential Information in confidence and shall disclose such Confidential Information only to its employees, agents, independent contractors, Affiliates, sublicensees, attorneys, accountants, and advisors who have a reasonable need to know such Confidential Information and who are bound by obligations of confidentiality and non-use no less restrictive than those set forth herein.

6.2 Permitted Usage and Disclosure. Notwithstanding the provisions of Section 6.1 above, the receiving party may use Confidential Information of the disclosing party to the extent necessary to exercise its rights hereunder (including commercialization and/or sublicensing of Licensed Subject Matter) or fulfill its obligations and/or duties hereunder and in filing for, prosecuting or maintaining any proprietary rights, and may disclose such Confidential Information of the disclosing party (a) as required, in connection with the order of a court or other governmental body; (b) as required by or in compliance with laws or regulations; and (c) in the case of Sponsor, as required in the course of obtaining regulatory and necessary institutional approvals to clinically test, sell or market Licensed Products or to perform research and development with respect to the Licensed Products as permitted under this Agreement, provided that if the receiving party is required by law, regulation or order of a court or other governmental body to make any public disclosures of Confidential Information of the disclosing party, the receiving party will, to the extent it may legally do so, give reasonable advance notice to the disclosing party of such disclosure and will use its reasonable efforts to secure confidential

treatment of Confidential Information prior to its disclosure (whether through protective orders or otherwise).

6.3 Residuals. Nothing in this Agreement shall restrict any employee or representative of Sponsor from using Know How retained in the unaided memory of such employee or representative following the termination of this Agreement. A person's memory is "unaided" if such person has not intentionally memorized the Confidential Information for the purpose of retaining and subsequently using or disclosing it.

ARTICLE 7
PATENTS AND INVENTIONS

7.1 Prosecution of Patent Rights. Buck shall, through patent counsel reasonably acceptable to Sponsor, direct and control the filing, prosecution and maintenance of all Patent Rights. For purposes of this Article 7, "prosecution and maintenance" of patents and patent applications shall be deemed to include, without limitation, the conduct of interferences or oppositions, and/or requests for re-examinations, reissues or extensions of patent terms. Buck shall provide Sponsor with (a) a copy of all patent applications within the Patent Rights prior to filing such application, allowing adequate time for review and comment by Sponsor unless it is impracticable; (b) copies of all material correspondence from any and all patent offices concerning any Patent Rights and, if applicable, an opportunity to comment on any proposed responses, voluntary amendments, and submissions of any kind to be made to any and all patent offices and (c) the right to directly consult with patent counsel. Buck and its patent counsel shall incorporate all reasonable comments provided by Sponsor under this Section 7.1.

7.2 Patent Costs. Sponsor acknowledges and agrees that the license granted hereunder is in partial consideration for Sponsor's assumption of the costs of prosecution and maintenance of the Patent Rights as described herein. Sponsor agrees to pay and shall pay for all reasonable out-of-pocket expenses incurred by Buck in connection with the prosecution and maintenance of the Patent Rights on or after the Effective Date (including the costs of reexamination, opposition and interference proceedings). In addition, on or before June 30, 2014 Sponsor shall reimburse Buck for all previously unreimbursed expenses incurred by Buck in connection with the prosecution and maintenance of the Existing Patent Rights prior to the Effective Date ("Past Patent Costs"), provided that Licensee's payment obligations with respect to such Past Patent Costs shall in no event exceed $[***]. If at any time Sponsor determines that it no longer desires to pay the patent costs with respect to one or more patents or patent applications within the Patent Rights, Sponsor shall give sixty (60) days advance written notice to Buck. Upon such notice, Buck shall use commercially reasonable efforts to minimize any additional patent costs, provided that Buck shall be free to continue the filing, prosecution, and/or maintenance of such applications(s) or patent(s) at its own expense. If Buck elects to exercise its back-up rights under the preceding sentence to file, prosecute or maintain any patent application or patent within the Patent Rights in a Major Country, Sponsor's license with respect to such patent or patent application shall terminate in such country. For clarity, Sponsor shall not be obligated to pay for any corresponding patent costs incurred after the end of such sixty (60) day period (but shall remain responsible for all patent costs incurred prior to and during such sixty (60) day period). Sponsor will pay all undisputed invoices for patent expenses incurred in accordance with this Article 7 within thirty (30) days of receipt of an invoice from Buck. If Sponsor fails to pay any

undisputed invoices with respect to one or more patents or patent applications within the Patent Rights, Sponsor's license with respect to such patent or patent application shall terminate. As used in this Section 7.2, "Major Country" shall mean the United States, Canada, United Kingdom, France, Germany, Italy, Spain, Australia and Japan.

ARTICLE 8
TERM AND TERMINATION

8.1 Term. Unless terminated earlier pursuant to this Article 8, the term of this Agreement shall commence on the Effective Date, and will continue in full force and effect until the expiration of Sponsor's payment obligations hereunder, unless earlier terminated pursuant to Section 8.2 or 8.3 below. Sponsor's license with respect to the Know-How shall survive the expiration (but not an earlier termination, except as provided in Section 8.4 below) of this Agreement and for clarity shall thereafter be fully paid-up, royalty free and irrevocable.

8.2 Termination for Breach. In the event of a material breach of this Agreement, the non-breaching party shall be entitled to terminate this Agreement by written notice to the breaching party, if such breach is not cured within sixty (60) days after written notice is given by the non-breaching party to the breaching party specifying the breach and requesting its cure. However, if the party alleged to be in breach of this Agreement disputes such breach within such sixty (60) day period, the non-breaching party shall not have the right to terminate this Agreement unless it has been determined by a court of competent jurisdiction that this Agreement was materially breached, and the breaching party fails to cure such breach within sixty (60) days after such determination.

8.3 Termination by Sponsor. Any provision herein notwithstanding, Sponsor may terminate this Agreement, in its entirety or as to any particular Licensed Product, at any time by giving Buck at least sixty (60) days prior written notice. From and after the effective date of a termination under this Section 8.3 with respect to a particular Licensed Product, the license granted under Section 2.1 above shall terminate with respect to such Licensed Product.

8.4 Survival.

(a) Termination of this Agreement for any reason shall not release either party hereto from any liability which at the time of such termination has already accrued to the other party.

(b) In the event this Agreement is terminated for any reason:

(i) Sponsor and Buck shall each return to the other all Confidential Information they have received from the other party, provided that one (1) copy of such Confidential Information may be retained by the receiving party for the purpose of complying with continuing obligations under this Agreement.

(ii) Sponsor shall provide Buck with a written inventory of all Royalty Products that Sponsor and its Affiliates have in process of manufacture, in use or in stock and Sponsor and its Affiliates shall have the right to sell or otherwise dispose of such Royalty Products, all subject to the payment to Buck of royalties pursuant to Article 3 hereof.

(c) Upon termination of this Agreement by Buck for any reason, any sublicense granted by Sponsor hereunder shall survive, provided that upon request by Buck, such Sublicensee promptly agrees in writing to be bound by the applicable terms of this Agreement.

(d) Articles 1, 6, 10, 11 and 13 and Sections 8.4, 9.1 and 9.3 (with respect to any enforcement actions in progress at the time of termination), and 12.3 shall survive the expiration and any termination of this Agreement. Additionally, in the event Sponsor elects to permissively terminate this Agreement in its entirety pursuant to Section 8.3, all payment obligations of Sponsor under Sections 3.3, 3.4 and 3.5 with respect to Tool Products and Know-How Products Sponsor elects to continue to develop and commercialize after termination shall survive termination of this Agreement (and Sponsor's non-exclusive license under Section 2.1(b) shall survive with respect to such Tool Products and Know-How Products). Except as otherwise provided in this Article 8, all rights and obligations of the parties under this Agreement shall terminate upon the expiration or termination of this Agreement.

ARTICLE 9
INFRINGEMENT

9.1 Enforcement. If either party becomes aware of a suspected infringement of any of the Patent Rights, that party shall promptly notify the other party in writing and the parties will meet and confer.

(a) Sponsor shall have the first right (itself or through others), at its sole option and expense, to bring suit to enforce the Patent Rights, and/or to defend any declaratory judgment action with respect thereto, in each case with respect to the manufacture, sale or use of a product within the Field; provided, however, that Sponsor shall keep Buck reasonably informed as to the defense and/or settlement of such action. Buck shall have the right to participate in any such action with counsel of its own choice at its own expense. All recoveries received by Sponsor from an action to enforce the Patent Rights shall be first applied to reimburse Sponsor's and then Buck's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringement of the Patent Rights, be divided [***] percent ([***]%) to Sponsor and [***] percent ([***]%) to Buck, provided that Buck's portion shall not exceed the amount Buck would have received as a royalty hereunder if the infringing activities had been made by Sponsor.

(b) In the event Sponsor elects not to initiate an action to enforce the Patent Rights against a Third Party for infringement within the Field within six (6) months of a request by Buck to do so, (or within such shorter period which may be required to preserve the legal rights of Buck under the laws of the relevant government), Buck may with Sponsor's consent, which consent shall not be unreasonably withheld, initiate such action at its own expense, in its own name, and under its own direction and control. Sponsor shall have the right to participate in any such action with counsel of its own choice at its own expense. All recoveries received by Buck from any such action shall be first applied to reimburse Buck's and then Sponsor's unreimbursed expenses, including without limitation, reasonable attorney's fees and court costs. Any remainder shall, to the extent the same pertains to an infringement of the Patent Rights in the Field, be divided [***] percent ([***]%) to Sponsor and [***] percent ([***]%) to Buck.

(c) If the suspected infringement by a Third Party is not with respect to the manufacture, sale or use of a product within the Field, Buck will have the right, but not the obligation, to bring an infringement action at its own expense, in its own name, and entirely under its own direction and control.

9.2 Defense. If Sponsor, its Affiliate, Sublicensee, distributor or other customer is sued by a third party charging infringement of patent rights that dominate a claim of the Patent Rights or that cover other Related Material with respect to the manufacture, use, distribution or sale of a Royalty Product, Sponsor will promptly notify Buck. As between the parties to this Agreement, Sponsor will be entitled to control the defense in any such action(s). If Sponsor is required to pay any settlements or damages to a third party in connection with such infringement action, then an amount equal to [***] percent ([***]%) of the amount of such settlements or damages actually paid to such third party by Sponsor (or its Affiliate or Sublicensee) with respect to such alleged infringement shall be offset against the amount of royalties otherwise owed to Buck with respect to the applicable Royalty Product; provided that the effective royalty rate due to Buck under Section 3.5, taking into account such offset and any other royalty reduction provided for in Section 3.6, if applicable, shall not be reduced by more than [***] percent ([***]%) or the rates specified in Section 3.5.

9.3 Cooperation. In any suit, action or other proceeding in connection with enforcement and/or defense of the Patent Rights as permitted under this Article 8, Buck shall cooperate fully, including without limitation by joining as a party plaintiff and executing such documents as Sponsor may reasonably request. Upon the request of and, at the expense of the party enforcing or defending the Patent Rights, the other party shall make available at reasonable times and under appropriate conditions all relevant personnel, records, papers, information, samples, specimens and other similar materials in the other party's possession.

9.4 No Implied Obligations. Except as expressly provided in this Article 9, neither party has any obligation to bring or prosecute actions or suits against any third party for patent infringement.

ARTICLE 10
INDEMNIFICATION

Sponsor shall hold harmless, indemnify and defend Buck and its Affiliates, trustees, directors, officers, employees, and agents and the successor and assigns of any of the foregoing (collectively, the "Indemnitees") from and against any and all liabilities, damages, penalties, expenses and/or losses, including reasonable attorneys' fees and other expenses of litigation resulting from any claims, actions, suits, or proceedings brought by third parties (any of the foregoing, a "Claim") against any Indemnitee, arising from or occurring as a result of (a) the exercise or practice of the rights and licenses granted under this Agreement by Sponsor or its Affiliates or Sublicensees, including, without limitation, the research, development, possession, storage, transport, importation, use, sale, marketing or distribution of Royalty Products, (b) a breach of any of Sponsor's obligations, representations or warranties under this Agreement, or (c) the negligence, recklessness or intentional misconduct of Sponsor, its Affiliates or Sublicensees in connection with this Agreement, but specifically excluding Claims, arising from or occurring as a result of a breach of any of Buck's obligations, representations or warranties

under this Agreement or the gross negligence, recklessness or intentional misconduct of Buck or its Affiliates; provided that an Indemnitee that intends to claim indemnification under this Article 10 shall: (i) promptly notify Sponsor in writing of any Claim with respect to which the Indemnitee intends to claim such indemnification, (ii) give Sponsor sole control of the defense and/or settlement thereof, and (iii) provide Sponsor, at Sponsor's expense, with reasonable assistance and full information with respect to such Claim. Sponsor shall not settle any claim, suit or proceeding subject to this Article 10 or otherwise consent to an adverse judgment in such claim, suit or proceeding if the same materially diminishes the rights or interests of the Indemnitee without the express written consent of the Indemnitee. Notwithstanding the foregoing, Sponsor shall have no obligations for any Claim if the Indemnitee seeking indemnification makes any admission or settlement regarding such Claim without the prior written consent of Sponsor, which consent shall not be unreasonably withheld.

ARTICLE 11
USE OF NAMES

Except as required by law or in the normal course of business identification, neither Sponsor nor Buck shall issue any press release or other written statements in connection with this Agreement intended for use in the public media in a manner suggesting any endorsement by the other of Sponsor or Buck (including Buck), respectively, without the approval of such other party, which approval shall not be unreasonably withheld.

ARTICLE 12
REPRESENTATIONS AND WARRANTIES

12.1 Warranties by Buck. Buck represents and warrants that (i) Buck has the sole right and authority to enter into this Agreement and grant the rights and licenses hereunder; (ii) Buck has not previously granted and will not grant any rights in the Licensed Subject Matter that are inconsistent with the rights and licenses granted to Sponsor herein; (iii) to its knowledge, there are no claims of third parties as of the Effective Date that would call into question the rights of Buck to grant to Sponsor the rights contemplated hereunder; and (iv) to its knowledge, except for the Patent Rights, as of the Effective Date, Buck does not own or control any patent or patent application (including any invention disclosure or draft patent application for which a patent application is intended to be filed) the claims of which would dominate any practice of the Licensed Subject Matter.

12.2 Mutual Warranties. Each party hereby represents and warrants as of the Effective Date:

(a) it is duly organized and validly existing under the laws of its state of incorporation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof.

(b) it is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder. The person executing this Agreement on its behalf has been duly authorized to do so by all requisite corporate action.

(c) This Agreement is a legal and valid obligation binding upon it and enforceable in accordance with its terms. The execution, delivery and performance of this Agreement by it do not conflict with any agreement, instrument or understanding, oral or written, to which it or any of its Affiliates is a party or by which it or any of its Affiliates may be bound.

12.3 Disclaimer. EXCEPT AS PROVIDED IN THIS ARTICLE 12, NEITHER PARTY MAKES ANY WARRANTIES OR CONDITIONS (EXPRESS, IMPLIED, STATUTORY OR OTHERWISE) WITH RESPECT TO THE SUBJECT MATTER HEREOF, AND BUCK SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL WARRANTIES AND CONDITIONS OF THE VALIDITY OF THE LICENSED SUBJECT MATTER OR NONINFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

ARTICLE 13
GENERAL

13.1 Patent Marking. Sponsor agrees to mark, and require its Affiliates and Sublicensees to mark, all Royalty Products sold with all applicable patent numbers within the Patent Rights or otherwise conform to patent laws and practices of the country in which such Royalty Product is sold.

13.2 No Implied Obligations. Sponsor's sole obligation to exploit the Licensed Subject Matter is as set forth in Article 5. Nothing in this Agreement shall be deemed to require Sponsor to otherwise exploit the Licensed Subject Matter nor prevent Sponsor from commercializing products similar to or competitive with a Licensed Product.

13.3 Independent Contractors. The relationship of Buck and Sponsor established by this Agreement is that of independent contractors. Nothing in this Agreement shall be construed to create any other relationship between Buck and Sponsor. Neither party shall have any right, power or authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other.

13.4 Confidential Terms. Except as expressly provided herein, each party agrees not to disclose any terms of this Agreement to any third party without the consent of the other party, except as required by securities or other applicable laws, to prospective and other investors and such party's accountants, attorneys and other professional advisors.

13.5 Assignment. This Agreement may not be assigned by a party without the prior written consent of the other party except to a party that succeeds to all or substantially all of the assigning party's business or assets relating to this Agreement whether by sale, merger, operation of law or otherwise; provided that such assignee or transferee promptly agrees in writing to be bound by the terms and conditions of this Agreement. Buck may assign its right to receive payments hereunder upon prior written notice to Sponsor.

13.6 Force Majeure. In the event either party hereto is prevented from or delayed in the performance of any of its obligations hereunder by reason of acts of God, war, strikes, riots, storms, fires, or any other cause whatsoever beyond the reasonable control of the party, the party

so prevented or delayed shall notify the other party as soon as reasonably possible, be excused from the performance of any such obligation to the extent and during the period of such prevention or delay, and resume performance hereunder as soon as reasonably possible following cessation of such event or occurrence. Notwithstanding the foregoing, a party shall not be excused from the performance of any of its payment obligations under this Section 13.6.

13.7 Notices. Any notice or other communication required by this Agreement shall be made in writing and given by prepaid, first class, certified mail, return receipt requested, or by reputable express courier and shall be deemed to have been served on the date received by the addressee at the following address or such other address as may from time to time be designated to the other party in writing:

If to Buck:	Buck Institute for Research on Aging 8001 Redwood Boulevard Novato, California 94945 Attention: VP, Business Development
If to Sponsor:	Unity Biotechnology, Inc. 3280 Brisbane Blvd Brisbane, California 94005 Attention: CEO
with a copy to:	Wilson Sonsini Goodrich & Rosati 650 Page Mill Road Palo Alto, California 94304-1050 Attention: [***].

13.8 Compliance with Law. Sponsor shall comply with all applicable federal, state and local laws and regulations in connection with its activities pursuant to this Agreement.

13.9 Governing Law. This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of California, without reference to its principles of conflicts of law.

13.10 No Waiver. No waiver hereunder shall be effective unless made in writing and signed by the waiving party. In addition, any such written waiver shall not constitute or be deemed to be a waiver of any other right hereunder or of any other failure to perform or breach hereof by such other party, whether of a similar or dissimilar nature thereto.

13.11 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY OR ANY THIRD PARTY FOR ANY SPECIAL, CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES (INCLUDING LOST OR ANTICIPATED REVENUES OR PROFITS RELATING TO THE SAME), ARISING FROM ANY CLAIM RELATING TO THIS AGREEMENT, WHETHER SUCH CLAIM IS BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, EVEN IF AN AUTHORIZED REPRESENTATIVE OF SUCH PARTY IS ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SAME. THE FOREGOING LIMITATION SHALL NOT APPLY, HOWEVER, TO A PARTY'S INDEMNIFICATION OBLIGATIONS PURSUANT

TO ARTICLE 9 OR TO A BREACH OF A PARTY'S CONFIDENTIALITY OBLIGATIONS UNDER ARTICLE 6. IN NO EVENT WILL BUCK'S LIABILITY ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT EXCEED THE TOTAL COMPENSATION THAT HAS BEEN PAID TO BUCK BY SPONSOR AS OF THE DATE OF FILING AN ACTION AGAINST BUCK THAT RESULTS IN A SETTLEMENT OR AWARD OF DAMAGES TO SPONSOR.

13.12 Headings. Headings included herein are for convenience only, do not form a part of this Agreement and shall not be used in any way to construe or interpret this Agreement.

13.13 Severability. If any provision of this Agreement shall be found by a court to be void, invalid or unenforceable, the same shall be reformed to comply with applicable law or stricken if not so conformable, so as not to affect the validity or enforceability of the remainder of this Agreement. In such event, the parties will in good faith negotiate a substitute clause for any provision declared invalid or unenforceable, which will most nearly approximate the intent of the parties in entering this Agreement.

13.14 Entire Agreement. This Agreement constitutes the entire understanding and agreement between the parties with respect to the subject matter hereof and supersedes any and all prior negotiations, representations, agreements, and understandings, written or oral, that the parties may have reached with respect to the subject matter hereof. No agreements altering or supplementing the terms hereof may be made except by means of a written document signed by the duly authorized representatives of each of the parties hereto. It is understood that the Buck Research Agreements are separate and independent from this Agreement and termination of either agreement shall not operate to terminate or otherwise affect the rights and obligations of the parties under the other agreement.

13.15 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but both of which together shall constitute one and the same instrument. Counterparts may be signed and delivered by facsimile or via email in Portable Document Format (PDF), each of which will be binding when sent.

13.16 Insurance. Prior to the commencement of any human clinical trials of a Royalty Product, Sponsor shall obtain a product/clinical trial liability insurance policy in good standing and adequate to cover its obligations hereunder and which are consistent with normal business practices of prudent companies similarly situated, during the period in which Sponsor is performing clinical studies (including any follow-up care) of Royalty Product (the "Trial Period"). Such policy shall remain in effect during the Trial Period and for ninety (90) days thereafter, and shall, to the extent written on a claims-made form, provide for a three (3) year tail covering circumstances, incidents, and/or claims arising from activities occurring prior to the termination of such policy. In any event, Sponsor shall name Buck as an additional insured on such policy and shall require the insurer to provide written notice to Buck within sixty (60) days of any change in or termination of such policy that would negatively impact the coverage of Sponsor under such policy. Sponsor shall provide a copy of such policy to Buck at least ninety (90) days prior to the commencement of human clinical trials. Additionally, upon and after the First Commercial Sale or distribution of a Royalty Product, and for so long as such Royalty Product is sold by or on behalf of Sponsor or its Affiliates, Sponsor shall maintain

comprehensive general liability, product liability and broad form contractual liability insurance in amounts and with coverage conditions customary for like products naming Buck as an additional insured.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized representatives to execute this Agreement.

Unity Biotechnology, Inc.	Buck institute for Research on Aging By:
By:/s/ Nathaniel David	By:/s/ Remy Gross, III
Name:Nathaniel David, PhD	Name:Remy Gross, III
Title:President	Title:Vice President, Business Development
Date:27 January 2017	Date:

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit A

Unity and Buck – Patent Portfolio Summary

[***]

Exhibit B

CENEXYS, INC.

STOCK PURCHASE AGREEMENT

This Stock Purchase Agreement (the "***Agreement***") is made as of February 3, 2014 by and between Cenexys, Inc., a Delaware corporation (the "***Company***"), and The Buck Institute for Research on Aging (the "***Purchaser***").

In consideration of the mutual covenants and representations set forth below, the Company and the Purchaser agree as follows:

1. **Purchase and Sale of the Shares.** Subject to the terms and conditions of this Agreement, the Company agrees to sell to the Purchaser and the Purchaser agrees to purchase from the Company on the Closing (as defined below) 390,000 shares of the Company's Common Stock, par value $0.0001 per share (the "***Shares***"), at a price of $0.006 per share (the "***Purchase Price***"), for aggregate consideration equal to $2,340.00.

2. **Closing.** The purchase and sale of the Shares shall occur at a closing (the "***Closing***") to be held on the date first set forth above, or at any other time mutually agreed upon by the Company and the Purchaser. The Closing will take place at the principal office of the Company or at such other place as shall be designated by the Company. At the Closing, the Purchaser shall deliver the aggregate Purchase Price set forth above to the Company by wire transfer, check or any other method of payment permissible under applicable law and approved by the Company's board of directors (or any combination of such methods of payment), and the Company will issue, as promptly thereafter as practicable, a stock certificate, registered in the name of the Purchaser, reflecting the Shares.

3. **Restrictions on Transfer.**

A. **Investment Representations and Legend Requirements.** The Purchaser hereby makes the investment representations listed on **Exhibit A** to the Company as of the date of this Agreement and as of the date of the Closing, and agrees that such representations are incorporated into this Agreement by this reference, such that the Company may rely on them in issuing the Shares. The Purchaser understands and agrees that the Company shall cause the legends set forth below, or substantially equivalent legends, to be placed upon any certificate(s) evidencing ownership of the Shares, together with any other legends that may be required by the Company or by applicable state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "**ACT**") AND MAY NOT BE OFFERED, SOLD OR OTHER WISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE

SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECA TION OTHERWISE COMPLIES WITH THE ACT.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER, A RIGHT OF FIRST REFUSAL, A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING AND A REPURCHASE OPTION HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE STOCK PURCHASE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS, RIGHT OF FIRST REFUSAL, LOCK-UP PERIOD AND REPURCHASE OPTION ARE BINDING ON TRANSFEREES OF THESE SHARES.

B. ***Stop-Transfer Notices.*** The Purchaser agrees that to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

C. ***Refusal to Transfer.*** The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

D. ***Lock-Up Period.*** The Purchaser hereby agrees that the Purchaser shall not sell, offer, pledge, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, grant any right or warrant to purchase, lend or otherwise transfer or encumber, directly or indirectly, any Shares or other securities of the Company, nor shall the Purchaser enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Shares or other securities of the Company, during the period from the filing of the first registration statement of the Company filed under the Securities Act of 1933, as amended (the "***Securities Act***"), that includes securities to be sold on behalf of the Company to the public in an underwritten public offering under the Securities Act through the end of the 180-day period following the effective date of such registration statement (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 271l(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The Purchaser further agrees, if so requested by the Company or any representative of its underwriters, to enter into such underwriter's standard form of "lockup" or "market standoff" agreement in a form satisfactory to the Company and such underwriter. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of any such restriction period.

E. ***Shares***. No Shares purchased pursuant to this Agreement, nor any beneficial interest in such Shares, shall be sold, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Purchaser or any subsequent transferee, other than in compliance with the Company's right of first refusal provisions contained in Section 4 of this Agreement.

4. **Company's Right of First Refusal.** Before any Shares acquired by the Purchaser pursuant to this Agreement (or any beneficial interest in such Shares) may be sold, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Purchaser or any subsequent transferee (each a "***Holder***"), such Holder must first offer such Shares or beneficial interest to the Company and/or its assignee(s) as follows:

A. ***Notice of Proposed Transfer.*** The Holder shall deliver to the Company a written notice stating: (i) the Holder's bona fide intention to sell or otherwise transfer the Shares; (ii) the name of each proposed transferee; (iii) the number of Shares to be transferred to each proposed transferee; (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares; and (v) that by delivering the notice, the Holder offers all such Shares to the Company and/or its assignee(s) pursuant to this section and on the same terms described in the notice.

B. ***Exercise of Right of First Refusal.*** At any time within 30 days after receipt of the Holder's notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the proposed transferees, at the purchase price determined in accordance with Section 4.C.

C. ***Purchase Price.*** The purchase price for the Shares purchased by the Company and/or its assignee(s) under this section shall be the price listed in the Holder's notice. If the price listed in the Holder's notice includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the board of directors of the Company in its sole discretion.

D. ***Payment.*** Payment of the purchase price shall be made, at the option of the Company and/or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company and/or its assignee(s), or by any combination thereof within 30 days after receipt by the Company of the Holder's notice (or at such later date as is called for by such notice).

E. ***Holder's Right to Transfer.*** If all of the Shares proposed in the notice to be transferred to a given proposed transferee are not purchased by the Company and/or its assignee(s) as provided in this section, then the Holder may sell or otherwise transfer such Shares to that proposed transferee; provided that: (i) the transfer is made only on the terms provided for in the notice, with the exception of the purchase price, which may be either the price listed in the notice or any higher price; (ii) such transfer is consummated within 60 days after the date the notice is delivered to the Company; (iii) the transfer is effected in accordance with any applicable securities laws, and if requested by the Company, the Holder shall have delivered an opinion of counsel

acceptable to the Company to that effect; and (iv) the proposed transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section. If any Shares described in a notice are not transferred to the proposed transferee within the period provided above, then before any such Shares may be transferred, a new notice shall be given to the Company, and the Company and/or its assignees shall again be offered the right of first refusal described in this section.

F. ***Involuntary Transfers.*** Subject to the other provisions of this Section 4, in the event, at any time after the date of this Agreement, of any transfer by operation of law or other involuntary transfer (including, but not limited to, transfers by operation of law or other involuntary transfers in connection with a divorce, dissolution, legal separation or annulment) of all or a portion of the Shares by the record holder thereof that does not occur in accordance with the other provisions of this Section 4, the Company shall have the right to purchase all of the Shares transferred at the greater of the purchase price paid by Purchaser pursuant to this Agreement or the fair market value of the Shares on the date of transfer (as determined by the board of directors of the Company). Upon such a transfer, the persons transferring or acquiring the Shares shall promptly notify the Secretary of the Company in writing of such transfer. The right to purchase such Shares shall be provided to the Company for a period of 30 days following receipt by the Company of written notice of the transfer.

G. ***Exception for Certain Affiliates.*** Notwithstanding anything to the contrary contained elsewhere in this section, the transfer of any or all of the Shares to an affiliated research organization shall be exempt from the provisions of this section; provided that, in each such case, the transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section; and provided further, that without the prior written consent of the Company, which may be withheld in the sole discretion of the Company, no more than three transfers may be made pursuant to this section, including all transfers by the Holder and all transfers by any transferee.

H. ***Termination of Right of First Refusal.*** The rights contained in this section shall terminate as to all Shares purchased hereunder upon the earlier of: (i) the closing date of the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act, and (ii) the closing date of a Change of Control pursuant to which the holders of the outstanding voting securities of the Company receive securities of a class registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended.

5. **Tax Consequences.** The Purchaser has reviewed with the Purchaser's own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. The Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. The Purchaser understands that

the Purchaser (and not the Company) shall be responsible for any tax liability that may arise as a result of the transactions contemplated by this Agreement.

6. **General Provisions.**

A. ***Choice of Law.*** This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of California.

B. ***Integration***. This Agreement, including all exhibits hereto, represents the entire agreement between the parties with respect to the purchase of the Shares by the Purchaser and supersedes and replaces any and all prior written or oral agreements regarding the subject matter of this Agreement including, but not limited to, any representations made during any interviews, relocation discussions or negotiations whether written or oral.

C. ***Notices.*** Any notice, demand, offer, request or other communication required or permitted to be given by either the Company or the Purchaser pursuant to the terms of this Agreement shall be in writing and shall be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one business day after being delivered by facsimile (with receipt of appropriate confirmation), (iv) one business day after being deposited with an overnight courier service or (v) four days after being deposited in the U.S. mail, First Class with postage prepaid and return receipt requested, and addressed to the parties at the addresses provided to the Company (which the Company agrees to disclose to the other parties upon request) or such other address as a party may request by notifying the other in writing.

D. ***Successors.*** Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this section or which becomes bound by the terms of this Agreement by operation of law. Subject to the restrictions on transfer set forth in this Agreement, this Agreement shall be binding upon the Purchaser and his or her heirs, executors, administrators, successors and assigns.

E. ***Assignment; Transfers.*** Except as set forth in this Agreement, this Agreement, and any and all rights, duties and obligations hereunder, shall not be assigned, transferred, delegated or sublicensed by the Purchaser without the prior written consent of the Company. Any attempt by the Purchaser without such consent to assign, transfer, delegate or sublicense any rights, duties or obligations that arise under this Agreement shall be void. Except as set forth in this Agreement, any transfers in violation of any restriction upon transfer contained in any section of this Agreement shall be void, unless such restriction is waived in accordance with the terms of this Agreement.

F. ***Waiver.*** Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, nor prevent that party from thereafter enforcing any other provision of this Agreement. The rights granted both parties hereunder are cumulative and shall not constitute a waiver of either party's right to assert any other legal remedy available to it.

G. ***Purchaser Investment Representations and Further Documents.*** The Purchaser agrees upon request to execute any further documents or instruments necessary or reasonably desirable in the view of the Company to carry out the purposes or intent of this Agreement, including (but not limited to) the applicable exhibits and attachments to this Agreement.

H. ***Severability.*** Should any provision of this Agreement be found to be illegal or unenforceable, the other provisions shall nevertheless remain effective and shall remain enforceable to the greatest extent permitted by law.

I. ***Rights as Stockholder.*** Subject to the terms and conditions of this Agreement, the Purchaser shall have all of the rights of a stockholder of the Company with respect to the Shares from and after the date that the Purchaser delivers a fully executed copy of this Agreement (including the applicable exhibits and attachments to this Agreement) and full payment for the Shares to the Company, and until such time as the Purchaser disposes of the Shares in accordance with this Agreement. Upon such transfer, the Purchaser shall have no further rights as a holder of the Shares so purchased except (in the case of a transfer to the Company) the right to receive payment for the Shares so purchased in accordance with the provisions of this Agreement, and the Purchaser shall forthwith cause the certificate(s) evidencing the Shares so purchased to be surrendered to the Company for transfer or cancellation.

J. ***Adjustment for Stock Split.*** All references to the number of Shares and the purchase price of the Shares in this Agreement shall be adjusted to reflect any stock split, stock dividend or other change in the Shares which may be made after the date of this Agreement.

K. ***Arbitration and Equitable Relief.***

(1) *Arbitration.* IN CONSIDERATION OF THE PROMISES IN THIS AGREEMENT, THE PURCHASER AGREES THAT ANY AND ALL CONTROVERSIES, CLAIMS, OR DISPUTES WITH ANYONE (INCLUDING THE COMPANY AND ANY EMPLOYEE, OFFICER, DIRECTOR, SHAREHOLDER OR BENEFIT PLAN OF THE COMPANY IN THEIR CAPACITY AS SUCH OR OTHERWISE) ARISING OUT OF, RELATING TO, OR RESULTING FROM THIS AGREEMENT, SHALL BE SUBJECT TO BINDING ARBITRATION UNDER THE ARBITRATION RULES SET FORTH IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1280 THROUGH 1294.2, INCLUDING SECTION 1283.05 (THE "**RULES**") AND PURSUANT TO CALIFORNIA LAW. DISPUTES WHICH THE PURCHASER AGREES TO ARBITRATE, AND THEREBY AGREES TO WAIVE ANY RIGHT TO A TRIAL BY JURY, INCLUDE ANY STATUTORY CLAIMS UNDER STATE OR FEDERAL LAW, INCLUDING, BUT NOT LIMITED TO, CLAIMS UNDER TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, THE AMERICANS WITH DISABILITIES

ACT OF 1990, THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967, THE OLDER WORKERS BENEFIT PROTECTION ACT, THE WORKER ADJUSTMENT AND RETRAINING NOTIFICATION ACT, THE CALIFORNIA FAIR EMPLOYMENT AND HOUSING ACT, THE FAMILY AND MEDICAL LEAVE ACT, THE CALIFORNIA FAMILY RIGHTS ACT, THE CALIFORNIA LABOR CODE, CLAIMS OF HARASSMENT, DISCRIMINATION OR WRONGFUL TERMINATION AND ANY STATUTORY CLAIMS. THE PURCHASER FURTHER UNDERSTANDS THAT THIS AGREEMENT TO ARBITRATE ALSO APPLIES TO ANY DISPUTES THAT THE COMPANY MAY HAVE WITH THE PURCHASER.

(2) *Procedure.* THE PURCHASER AGREES THAT ANY ARBITRATION WILL BE ADMINISTERED BY THE AMERICAN ARBITRATION ASSOCIATION ("***AAA***") AND THAT THE NEUTRAL ARBITRATOR WILL BE SELECTED IN A MANNER CONSISTENT WITH ITS NATIONAL RULES FOR THE RESOLUTION OF EMPLOYMENT DISPUTES. THE PURCHASER AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO DECIDE ANY MOTIONS BROUGHT BY ANY PARTY TO THE ARBITRATION, INCLUDING MOTIONS FOR SUMMARY JUDGMENT AND/OR ADJUDICATION AND MOTIONS TO DISMISS AND DEMURRERS, PRIOR TO ANY ARBITRATION HEARING. THE PURCHASER ALSO AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO AWARD ANY REMEDIES, INCLUDING ATTORNEYS' FEES AND COSTS, AVAILABLE UNDER APPLICABLE LAW. PURCHASER UNDERSTANDS THAT THE COMPANY WILL PAY FOR ANY ADMINISTRATIVE OR HEARING FEES CHARGED BY THE ARBITRATOR OR AAA EXCEPT THAT PURCHASER SHALL PAY THE FIRST $125.00 OF ANY FILING FEES ASSOCIATED WITH ANY ARBITRATION PURCHASER INITIATES. PURCHASER AGREES THAT THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN A MANNER CONSISTENT WITH THE RULES AND THAT TO THE EXTENT THAT THE AAA'S NATIONAL RULES FOR THE RESOLUTION OF EMPLOYMENT DISPUTES CONFLICT WITH THE RULES, THE RULES SHALL TAKE PRECEDENCE. THE PURCHASER AGREES THAT THE DECISION OF THE ARBITRATOR SHALL BE IN WRITING.

(3) *Remedy.* EXCEPT AS PROVIDED BY THE RULES AND THIS AGREEMENT, ARBITRATION SHALL BE THE SOLE, EXCLUSIVE AND FINAL REMEDY FOR ANY DISPUTE BETWEEN THE PURCHASER AND THE COMPANY. ACCORDINGLY, EXCEPT AS PROVIDED FOR BY THE RULES AND THIS AGREEMENT, NEITHER THE PURCHASER NOR THE COMPANY WILL BE PERMITTED TO PURSUE COURT ACTION REGARDING CLAIMS THAT ARE SUBJECT TO ARBITRATION. NOTWITHSTANDING, THE ARBITRATOR WILL NOT HAVE THE AUTHORITY TO DISREGARD OR REFUSE TO ENFORCE ANY LAWFUL COMPANY POLICY, AND THE ARBITRATOR SHALL NOT ORDER OR REQUIRE THE COMPANY TO ADOPT A POLICY NOT OTHERWISE REQUIRED BYLAW WHICH THE COMPANY HAS NOT ADOPTED.

(4) *Voluntary Nature of Agreement.* THE PURCHASER ACKNOWLEDGES AND AGREES THAT THE PURCHASER IS EXECUTING THIS

AGREEMENT VOLUNTARILY AND WITHOUT ANY DURESS OR UNDUE INFLUENCE BY THE COMPANY OR ANYONE ELSE. THE PURCHASER FURTHER ACKNOWLEDGES AND AGREES THAT THE PURCHASER HAS CAREFULLY READ THIS AGREEMENT AND THAT THE PURCHASER HAS ASKED ANY QUESTIONS NEEDED FOR THE PURCHASER TO UNDERSTAND THE TERMS, CONSEQUENCES AND BINDING EFFECT OF THIS AGREEMENT AND FULLY UNDERSTANDS IT, INCLUDING ***THAT THE PURCHASER IS WAIVING THE PURCHASER'S RIGHT TO A JURY TRIAL***. FINALLY, THE PURCHASER AGREES THAT THE PURCHASER HAS BEEN PROVIDED AN OPPORTUNITY TO SEEK THE ADVICE OF AN ATTORNEY OF THE PURCHASER'S CHOICE BEFORE SIGNING THIS AGREEMENT.

L. ***Reliance on Counsel and Advisors.*** The Purchaser acknowledges that Wilson Sonsini Goodrich & Rosati, Professional Corporation, is representing only the Company in this transaction. The Purchaser acknowledges that he or she has had the opportunity to review this Agreement, including all attachments hereto, and the transactions contemplated by this Agreement with his or her own legal counsel, tax advisors and other advisors. The Purchaser is relying solely on his or her own counsel and advisors and not on any statements or representations of the Company or its agents for legal or other advice with respect to this investment or the transactions contemplated by this Agreement.

M. ***Counterparts.*** This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Facsimile copies of signed signature pages shall be binding originals.

(signature page follows)

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement. The Purchaser agrees to notify the Company of any change in his or her address below.

THE BUCK INSTITUTE FOR RESEARCH ON AGING

/s/ Remy Gross, III
Signature

Remy Gross, III
Print Name

VP, Business Development
Print Title

Address:

8001 Redwood Blvd.

Novato, CA 94945

CENEXYS, INC.

Signature

Print Name

Print Title

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement. The Purchaser agrees to notify the Company of any change in his or her address below.

THE BUCK INSTITUTE FOR RESEARCH ON AGING	**CENEXYS, INC.**
Signature	/s/ Nathaniel David *Signature*
Print Name	Nathaniel David *Print Name*
Print Title	February 25, 2014 *Print Title*
Address:	

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Exhibit C

Proprietary Research Tools and Proprietary Research Tool Patents

None.

Exhibit D

MATERIAL TRANSFER AGREEMENT
Buck Institute for Research on Aging

Dr. _____ (Recipient Scientist) DATE
COMPANY NAME
ADDRESS
ADDRESS

Buck Institute for Research on Aging ("Buck") is pleased to be able to provide INSERT MATERIALS HERE and any components thereof, which we shall refer to throughout this agreement as the "Material," to you at COMPANY NAME (Company). Buck is interested in supporting research using the Material and will provide you with samples of the Material as long as you agree to certain conditions on your use of the Material. The conditions described below are necessary to insure that the Material is used solely for research and that Buck's interests in any possible commercialization of the Material are protected. These conditions are:

1. The Material is owned by Buck and is provided under a license agreement effective as of ____ ("License") between the parties. Upon termination of your research or use of the Material and/or at the instructions of Buck, you shall either return the Material to Buck or destroy all unused portions of the Material.

2. Use of the Material must be in compliance with the terms of the license agreement and applicable laws and regulations. The Material must not be used in human subjects, in clinical trials, or for diagnostic purposes involving human subjects, without the written consent of Buck.

3. The Material must not be transferred to any other parties, other than researchers at your Company or collaborators that are working on specific research projects on behalf of the Company (and transferred for the purpose of such collaboration) without first having obtained a written agreement to the transfer from Buck. No researchers working with you may use the Material unless they are aware of and agree to be bound by the terms of this agreement. Both parties shall comply with all applicable laws and regulations, as amended from time to time, with respect to the collection, use, storage and disclosure of the Material and any related data, including without limitation, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and its implementing regulations (45 C.F.R. et.seq.)

4. Except to the extent prohibited by law, Company will assume all liability for damages which may arise from its use, storage or disposal of the Material. Buck will not be liable to Company for any loss, claim or demand made by Company or made against Company by any other party, due to or arising from the use of the Material by Company, except to the extent permitted by law when caused by the gross negligence or willful misconduct of Buck.

5. ANY MATERIAL DELIVERED PURSUANT TO THIS AGREEMENT IS UNDERSTOOD TO BE EXPERIMENTAL IN NATURE AND MAY HAVE HAZARDOUS PROPERTIES. ANY MATERIAL PROVIDED IS PROVIDED AS IS AND BUCK MAKES NO AND HEREBY DISCLAIMS ALL REPRESENTATIONS OR WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE MATERIAL WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK OR OTHER PROPRIETARY RIGHTS.

6. Company agrees to provide appropriate acknowledgement of the source of the Material in all publications.

7. Company agrees to pay $ _____in partial reimbursement of the costs of producing, maintaining and distributing the Material.

8. Company will not use publicly for publicity, promotion, or otherwise, any logo, name, trade name, service mark, or trademark of Buck or its Affiliates, including, but not limited to the terms “Buck,” “Buck Institute,” and the Buck logo, or any simulation, abbreviation, or adaptation of the same, or the name of any Buck employee or agent, without Buck’s prior, written, express consent, other than provided in Section 6 above. Buck may withhold such consent in Buck’s absolute discretion.

9. This agreement, in conjunction with the license agreement, constitutes the final, complete and exclusive agreement between the parties with respect to its subject matter and supercedes all past and contemporaneous agreements, promises, and understandings, whether oral or written, between the parties. This agreement shall be binding upon and inure to the benefit of the parties, their heirs, legal representatives, successors and assigns. This agreement may not be amended or modified except by a writing signed by both parties and identified as an amendment to this agreement. Neither this agreement nor any of the rights or obligations under the agreement may be assigned by Company without the written consent of Buck. The failure of Buck to insist at any time upon the strict observance or performance of any of the provisions of this agreement, or to exercise any right or remedy as provided in this agreement, will not impair any such right or remedy and will not be construed to be a waiver or relinquishment of the right or remedy. Execution of this agreement can be effected by photocopied, scanned or faxed signatures.

If you agree to these conditions, please sign in the space provided below as the Recipient and have an authorized representative of your Company sign where indicated. Return the agreement to Buck Institute for Research on Aging, 8001 Redwood Boulevard, Novato, California 94945. Upon receipt of the signed agreement, Buck will provide the Material as requested.

[SIGNATURES ON THE NEXT PAGE]

BUCK INSTITUTE ON AGING

By: Date: _____
[insert name and title of Buck signatory]

READ AND UNDERSTOOD BY THE RECIPIENT SCIENTIST:

_____
(Recipient Scientist Signature)* (Recipient Scientist)

ACCEPTED AND AGREED BY AUTHORIZED REPRESENTATIVE OF RECEIVING COMPANY

By: Date: _____
(Authorized Representative's Signature)*

Printed Name and Title: : _____

Company: _____

Address: _____

_____

Phone No.: _____

*Please Note: The Recipient and the Authorized Representative cannot be the same.

Exhibit 10.21

EXCLUSIVE LICENSE AGREEMENT

BETWEEN

THE JOHNS HOPKINS UNIVERSITY

&

UNITY BIOTECHNOLOGY, INC.

JHU Agreement: A30652

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (the "Agreement") is entered into by and between THE JOHNS HOPKINS UNIVERSITY, a Maryland corporation having an address at 3400 N. Charles Street, Baltimore, Maryland, 21218-2695 ("JHU") and Unity Biotechnology, Inc., a Delaware corporation having an address at 3280 Brisbane Blvd, Brisbane CA 94005 ("Company"), with respect to the following:

RECITALS

WHEREAS, as a center for research and education, JHU is interested in licensing PATENT RIGHTS (hereinafter defined) in a manner that will benefit the public by facilitating the distribution of useful products and the utilization of new processes, but is without capacity to commercially develop, manufacture, and distribute any such products or processes; and

WHEREAS, a valuable invention entitled "Improvement of Cartilage Tissue Forming Ability by Clearance of Senescent Cells" (JHU Ref. # C13890) was developed during the course of research conducted by Drs. Jennifer Elisseeff, Okhee Jeon Chaekyu Kim, and Sona Rathod (all hereinafter, "Inventors"); and

WHEREAS, JHU has acquired through assignment all rights, title and interest, with the exception of certain retained rights by the United States Government, in its interest in said valuable inventions; and

WHEREAS, Company desires to obtain certain rights in such inventions as herein provided, and to commercially develop, manufacture, use and distribute products and processes based upon or embodying said valuable inventions throughout the world.

NOW THEREFORE, in consideration of the premises and the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

ARTICLE 1
DEFINITIONS

All references to particular Exhibits, Articles or Paragraphs shall mean the Exhibits to, and Paragraphs and Articles of, this Agreement, unless otherwise specified. For the purposes of this Agreement and the Exhibits hereto, the following words and phrases shall have the following meanings:

1.1 "**AFFILIATED COMPANY**" as used herein in either singular or plural shall mean any corporation, company, partnership, joint venture or other entity, which controls, is controlled by or is under common control with Company. For purposes of this Paragraph 1.1, control shall mean the direct or indirect ownership of at least fifty percent (50%).

1.2 "**EFFECTIVE DATE**" of this License Agreement shall mean the date the last party hereto has executed this Agreement.

1.3 "**EXCLUSIVE LICENSE**" shall mean a grant by JHU to Company of its entire right and interest in the PATENT RIGHTS subject to rights retained by the United States Government, if any, in accordance with the Bayh-Dole Act of 1980 (established by P.L. 96-517 and amended by P.L. 98-620, codified at 35 USC § 200 et. seq. and implemented according to 37 CFR Part 401), and subject to the retained right of JHU to practice for its and The Johns Hopkins Health Systems' non-commercial academic research and teaching purposes the PATENT RIGHTS, including the ability to distribute any biological material disclosed and/or claimed in PATENT RIGHTS for nonprofit non-commercial academic research use to non-commercial entities as is customary in the scientific community.

1.4 "**KNOW-HOW AND MATERIALS**" shall mean JHU's interest in proprietary materials, information, records, and data developed by Inventors and in the custody and control of JHU that are supplied to the LICENSEE by JHU on or before or after the EFFECTIVE DATE of this Agreement directly related to the use of and practice of PATENT RIGHTS. Provided, however, that although JHU may supply additional KNOW HOW AND MATERIALS after the EFFECTIVE DATE, JHU shall have no obligation to do so unless specifically and clearly stated in this Agreement.

1.5 "**LICENSED FIELD**" shall mean all fields of use.

1.6 "**LICENSED PRODUCT(S)**" as used herein in either singular or plural shall mean any material, compositions, drug, or other product, the manufacture, use or sale of which by Company, AFFILIATED COMPANIES and/or SUBLICENSEES would constitute, but for the license granted to Company pursuant to this Agreement, an infringement of a VALID CLAIM of PATENT RIGHTS (infringement shall include, but is not limited to, direct, contributory, or inducement to infringe).

1.7 "**NEOCHONDROGENESIS CLAIM**" shall mean a VALID CLAIM of the PATENT RIGHTS that claims a method for treatment of cartilage defects resulting from osteoarthritis through the administering of a senolytic agent to induce neochondrogenesis.

1.8 "**NET SALES**" shall mean gross sales revenues and fees actually received by Company, AFFILIATED COMPANY and SUBLICENSEES from the sale of ROYALTY PRODUCT(S) less (i) trade, quantity or cash discounts allowed, (ii) refunds, credits or allowances for returns, rejections and recalls; (iii) rebates and chargebacks, (iv) sales, use or other taxes and tariffs, duties or other charges levied by a governmental entity on the production, sale, delivery or use of ROYALTY PRODUCT(S), and (iv) packing, freight, shipping and insurance charges.

In the event that Company, AFFILIATED COMPANY or SUBLICENSEE sells a ROYALTY PRODUCT as part of a combination, then:

(i) in the event that Company, AFFILIATED COMPANY or SUBLICENSEE sells in a particular country during a particular year a ROYALTY PRODUCT together with other non-therapeutic ingredients or substances or as part of a kit, and Company or AFFILIATED COMPANY also sells such ROYALTY PRODUCT in such country in such year separately the NET SALES for purposes of royalty payments shall be based on the sales revenues and fees that

would be received from the separate sale of the same quantity of ROYALTY PRODUCT as is contained in the combination.

(ii) in the event that Company, AFFILIATED COMPANY or SUBLICENSEE sells, in a particular country during a particular year, a ROYALTY PRODUCT for therapeutic purposes in combination with a therapeutically active ingredient which is not a LICENSED PRODUCT ("Other Items"), the NET SALES for purposes of royalty payments shall be calculated as follows:

(a) If all ROYALTY PRODUCTS and Other Items contained in the combination are available separately in the particular country during such year, the NET SALES for purposes of royalty payments will be calculated by multiplying the NET SALES of the combination by the fraction A/A+B, where A is the separately available price of all ROYALTY PRODUCTS in the combination in the particular country during such year, and B is the separately available price for all Other Items in the combination in the particular country during such year.

(b) If a ROYALTY PRODUCT or Other Item contained in the combination is not sold separately in the particular country during such year, the parties agree to negotiate a reduction in the royalty rate to reflect the fair value that the ROYALTY PRODUCT attributed to the overall product sold.

The term "Other Items" does not include solvents, diluents, carriers, excipients, buffers or the like used in formulating a product.

(c) In no event shall Company apply the credit in both paragraphs above to the same sale of a LICENSED PRODUCT.

In the event that Company enters into a sublicense agreement hereunder, and receives payments based upon the SUBLICENSEE's sales of ROYALTY PRODUCTS, Company may upon consent of JHU, which consent shall not be unreasonably withheld, substitute the definition of "net sales" used in said sublicense agreement by the SUBLICENSEE to calculate payments to Company in place of the foregoing definition of "NET SALES" for purposes of calculating royalties payable to JHU on such SUBLICENSEE's sales under such sublicense agreement. For clarity, JHU shall be entitled to withhold its consent to any proposed alteration to the definition of "net sales" that would materially alter the royalty payments due to JHU on the applicable SUBLICENSEE's sales of ROYALTY PRODUCTS.

1.9 "**PARTNERSHIP PROCEEDS**" shall mean consideration received by Company to the extent attributable to a grant of a sublicense under the PATENT RIGHTS with respect to a ROYALTY PRODUCT, including licensing fees, equity investments above fair market value, and any other sublicensing revenue received by Company to the extent attributable to a grant of a sublicense under the PATENT RIGHTS with respect to a ROYALTY PRODUCT, but specifically *excluding* consideration received: (i) as royalties for sales of products, (ii) payments for the occurrence of specified development, regulatory or commercialization milestones, (iii) for the performance of or reimbursement for research or activities performed by or on behalf of Company, (iv) for the sale of capital stock or other equity interests in Company, (v) as reimbursement for costs incurred by Company (e.g., patent costs), (vi) for grants of rights to technology other than

PATENT RIGHTS, (vii) for the supply of ROYALTY PRODUCTS, or other products, materials to such SUBLICENSEE, and (viii) for the sale of substantially all of the business or assets of Company, whether by merger, sale of stock, sale of assets or otherwise.

1.10 "**PATENT RIGHTS**" shall mean the patent application listed in EXHIBIT D together with any subsequently filed patent applications owned by JHU that claim inventions made in the laboratory of Inventor, Dr. Jennifer Elisseeff, prior to the Effective Date, which inventions arose from the use of funds provided by Company and pertain to the mechanisms by which senescent cells give rise to aging and/or disease, and all continuations, divisions, continuations-in- part and continued prosecution applications with respect to any of the foregoing, all patents issuing from such patent applications, and all reissues, renewals, reexaminations, extensions and supplemental protection certificates thereof, and any corresponding foreign patent applications, and any patents, or other equivalent foreign patent rights issuing, granted or registered thereon.

1.11 "**ROYALTY PRODUCT**" shall mean a LICENSED PRODUCT sold for treatment of osteoarthritis pursuant to a marketing approval from the FDA, European Medicines Agency or comparable foreign regulatory authority.

1.12 "**ROYALTY TERM**" shall mean with respect to a particular ROYALTY PRODUCT, the period commencing on the first commercial sale of such ROYALTY PRODUCT and continuing on a country-by-country basis, until the earlier of (i) such time as neither the manufacture, sale nor use of such ROYALTY PRODUCT would infringe a VALID CLAIM in the country in which such ROYALTY PRODUCT is sold, and (ii) such time as there is no U.S. or EP patent within the PATENT RIGHTS containing a NEOCHONDROGENESIS CLAIM.

1.13 "**SUBLICENSEE(S)**" as used herein in either singular or plural shall mean any person or entity other than an AFFILIATED COMPANY to which Company or an AFFILIATED COMPANY has granted a sublicense under this Agreement.

1.14 "**VALID CLAIM**" shall mean either: (a) a claim of an issued and unexpired patent included within the PATENT RIGHTS which has not been revoked or held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been disclaimed, denied or admitted to be invalid or unenforceable through reexamination, reissue, disclaimer or otherwise; or (b) a claim of a pending patent application included within the PATENT RIGHTS, which claim has not been abandoned or finally disallowed without the possibility of appeal or refiling of such application, and has been pending for less than five (5) years from the date such claim takes priority, unless and so long as the claim is still being pursued with reasonable diligence, in which case less than seven (7) years; in each case to the extent such pending claim has not been (i) canceled, (ii) withdrawn from consideration, (iii) finally determined to be unallowable by the applicable governmental authority (and from which no appeal is or can be taken), or (iv) abandoned. Determination of whether a claim of any patent within the PATENT RIGHTS is a VALID CLAIM shall be made on a country-by-country or jurisdiction-by- jurisdiction basis and shall be based solely on the decisions of the patent office and/or the courts having jurisdiction within that particular country or jurisdiction. For purposes of this Agreement, any decision adverse to the PATENT RIGHTS in a particular country or jurisdiction shall not affect said PATENT RIGHTS in any other country or jurisdiction.

ARTICLE 2
LICENSE GRANT

2.1 **Grant**. Subject to the terms and conditions of this Agreement, JHU hereby grants to Company

(i) a world-wide EXCLUSIVE LICENSE to research, have researched, develop, have developed, make, have made, use, have used, import, have imported, offer for sale, have offered for sale, sell and have sold the LICENSED PRODUCT(S) in the United States and worldwide under the PATENT RIGHTS in the LICENSED FIELD, and

(ii) a world-wide nonexclusive license to use the KNOW HOW AND MATERIALS in the LICENSED FIELD.

This Grant shall apply to the Company and any AFFILIATED COMPANY. If any AFFILIATED COMPANY exercises rights under this Agreement, such AFFILIATED COMPANY shall be bound by all terms and conditions of this Agreement, including but not limited to indemnity and insurance provisions and royalty payments, which shall apply to the exercise of the rights, to the same extent as would apply had this Agreement been directly between JHU and the AFFILIATED COMPANY. In addition, Company shall remain fully liable to JHU for all acts and obligations of AFFILIATED COMPANY such that acts of the AFFILIATED COMPANY shall be considered acts of the Company. KNOW HOW AND MATERIALS may be transferred by JHU to Company from time-to-time, provided that it is understood that JHU shall not be obligated to make any such transfers.

2.2 **Sublicense**. Company may grant and authorize sublicenses through multiple tiers under the licenses granted to it pursuant to Paragraph 2.1, subject to the terms and conditions of this Paragraph 2.2. As a condition to its validity and enforceability, each sublicense agreement shall: (a) reference and give recognition to this Agreement, (b) be consistent with the terms, conditions and limitations of this Agreement, (c) name JHU as an intended third party beneficiary of the obligations of SUBLICENSEE with respect to provisions to be included in the sublicense agreement for JHU's benefit in accordance with subsection (d) below, in each case without imposition of obligation or liability on the part of JHU or its Inventors to the SUBLICENSEE, and (d) specifically incorporate Paragraphs 6.2 "Representations by JHU", 7.1 "Indemnification", 10.1 "Use of Name", 10.4 "Product Liability" into the body of the sublicense agreement, and cause the terms used in therein to have the same meaning as in this Agreement, provided that notwithstanding the terms of Paragraph 10.4, SUBLICENSEE, if it is an organization with a market capitalization in excess of [***] US Dollars (USD$[***]), may self insure so long as SUBLICENSEE represents and warrants that it is self insured for potential amounts payable pursuant to obligations under this Agreement, shall have the right to self-insure to the extent consistent with its normal business practices. Company shall provide to JHU a copy of each fully executed sublicense agreement, within thirty (30) days of execution by both Company and proposed SUBLICENSEE, provided that Company may redact from such copy any confidential terms that are not necessary to determine compliance with this Agreement. To the extent that any terms, conditions or limitations of any sublicense agreement are inconsistent with this Agreement, those terms, conditions and limitations are null and void against JHU.

2.3 Government Rights. The United States Government may have acquired a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the inventions described in PATENT RIGHTS throughout the world. To the extent that the inventions claimed in the PATENT RIGHTS were funded by grants, awards or contracts with the United States government, the rights granted herein are additionally subject to: (i) the requirement that any LICENSED PRODUCT(S) produced for use or sale within the United States shall be substantially manufactured in the United States (unless a waiver under 35 USC § 204 or equivalent is granted by the appropriate United States government agency), (ii) the right of the United States government to require JHU, or its licensees, including Company, to grant sublicenses to responsible applicants on reasonable terms when necessary to fulfill health or safety needs, and, (iii) other rights acquired by the United States government under the laws and regulations applicable to the grant/contract award under which the inventions were made.

ARTICLE 3
FEES, ROYALTIES & PAYMENTS

3.1 Minimum Annual Royalties. Company shall pay to JHU minimum annual royalties as set forth in Exhibit A. These minimum annual royalties shall be due, without invoice from JHU, within sixty (60) days of December 31 of each year, commencing with December 31, 2020 Running royalties accrued under Paragraph 3.2 and milestones accrued under Paragraph 3.5 and paid to JHU during each calendar year, commencing with calendar year 2020 shall be credited against the minimum annual royalties due at the end of such calendar year.

3.2 Running Royalties. Company shall pay to JHU a running royalty in accordance with Exhibit A for each ROYALTY PRODUCT sold by Company, AFFILIATED COMPANIES and SUBLICENSEES during the ROYALTY TERM. Such payments shall be made quarterly, as set forth in subsection 5.1(a). All non-US taxes related to LICENSED PRODUCT(S) sold under this Agreement shall be paid by Company and shall not be deducted from royalty or other payments due to JHU, but shall be deducted from gross sales revenues in the calculation of NET SALES to the extent such taxes have been included in gross sales revenues and fees. JHU shall be responsible for paying any and all taxes (other than withholding taxes or deduction of tax at source required by applicable law to be paid by Company) levied on it by account of its receipt of any payments it receives under this Agreement. If applicable laws require that taxes be withheld or deducted at source from any amounts due to JHU under this Agreement, the Company shall (a) deduct these taxes from the remittable amount, (b) pay the taxes to the proper taxing authority, and (c) deliver to JHU a statement including the amount of tax withheld and justification therefor, and such other information as may be necessary for tax credit purposes. Company shall cooperate with JHU in any action by JHU for a refund of such taxes withheld.

In order to insure JHU the full royalty payments contemplated hereunder, Company agrees that in the event any ROYALTY PRODUCT(S) shall be sold by the Company to an AFFILIATED COMPANY, by an AFFILIATED COMPANY to the Company, or among AFFILIATED COMPANIES the royalties to be paid hereunder for such LICENSED PRODUCT(S) shall be based upon the greater of: 1) the NET SALES at which the purchaser of ROYALTY PRODUCT(S) resells such product to the end user, or 2) the NET SALES of ROYALTY PRODUCT(S) paid by the purchaser (either COMPANY or AFFILIATED COMPANY in this case). Notwithstanding the foregoing, no royalties shall be payable under this Paragraph 3.2 with

respect to sales of ROYALTY PRODUCT(S) for use in research and/or development, in clinical trials or as samples.

In the event that consideration in lieu of money is received by Company, an AFFILIATED COMPANY or SUBLICENSEE from the sale of LICENSED PRODUCT(S), the fair market value of such consideration shall be included in the determination of NET SALES for such sale. Such fair market value shall be determined by the Company or AFFILIATED COMPANY, as applicable, in good faith.

3.3 Partnership Proceeds. In addition to the running royalty as set forth under Paragraph 3.2, Company shall pay to JHU a percentage of PARTNERSHIP PROCEEDS as set forth in Exhibit A. This percentage of PARTNERSHIP PROCEEDS shall be due, without the need for invoice from JHU, within sixty (60) days after the end of each calendar quarter in which PARTNERSHIP PROCEEDS are received.

3.4 Equity. Within thirty (30) days of achievement of the triggering events described in Exhibit A and subject to JHU's execution and delivery to Company of a Stock Issuance Agreement in substantially the form attached hereto as Exhibit E, Company shall issue to JHU the number of shares of Company common stock as set forth in Exhibit A (which number of shares shall be subject to adjustment for any stock split, reverse stock split, stock dividend, recapitalization or similar action impacting Company's capitalization as further described in the Stock Issuance Agreement).

3.5 Milestones. Company shall pay to JHU the development and sales milestones as set forth in Exhibit A. Development milestones shall be due, without invoice from JHU, within sixty (60) days of achievement of such milestone. Sales milestones shall be due, without invoice from JHU, within ninety (90) days following the close of the calendar year in which they are achieved.

3.6 Patent Reimbursement. In the event Company licenses JHU Owned Patent Rights, Company will reimburse JHU for the costs associated with preparing, filing, maintaining and prosecuting JHU Owned Patent Rights both incurring before the EFFECTIVE DATE and thereafter for the TERM of this AGREEMENT. Company will reimburse within sixty (60) days of the receipt of invoice from JHU, for all such costs.

3.7 Form of Payment. All payments under this Agreement shall be made in U.S. Dollars by either check or wire transfer.

3.8 Payment Information. All check payments from Company to JHU shall be sent to:

Director
Johns Hopkins Technology Ventures
The Johns Hopkins University
100 N. Charles Street, 5th Floor
Baltimore, MD 21201
Attn: JHU Agrmt# A30652

or such other addresses which JHU may designate in writing from time to time. Checks are to be made payable to "The Johns Hopkins University". Wire transfers may be made through:

[***]
(JHU Agrmt. #A30652)
Attn: Financial Manager

Company shall be responsible for any and all costs associated with wire transfers.

Via ACH
Johns Hopkins University Central Lockbox
[***]

3.9 Late Payments. In the event that any payment due hereunder is not made when due, the payment shall accrue interest beginning on the tenth day following the due date thereof, calculated at the annual rate of the sum of (a) two percent (2%) plus (b) the prime interest rate quoted by The Wall Street Journal on the date said payment is due, the interest being compounded on the last day of each calendar quarter, provided however, that in no event shall said annual interest rate exceed the maximum legal interest rate for corporations. Each such payment when made shall be accompanied by all interest so accrued. Said interest and the payment and acceptance thereof shall not negate or waive the right of JHU to seek any other remedy, legal or equitable, to which it may be entitled because of the delinquency of any payment including, but not limited to termination of this Agreement as set forth in Paragraph 9.2, subject to the cure provisions set forth therein.

ARTICLE 4
PATENT PROSECUTION, MAINTENANCE, & INFRINGEMENT

4.1 Prosecution & Maintenance.

(a) Company shall be responsible, at its expense, for filing, prosecuting and maintaining all jointly owned patents and patent applications within the PATENT RIGHTS ("JOINTLY OWNED PATENT RIGHTS") using counsel of its choice. Company shall have control over all patent matters in connection with the JOINTLY OWNED PATENT RIGHTS, provided however, that Company shall (i) cause its patent counsel to timely copy JHU on all correspondence regarding strategy, filing and prosecution of all patents and patent applications within the JOINTLY OWNED PATENT RIGHTS, between Company's patent counsel and any patent office, including without limitation all official actions and written correspondence with any patent office, and (ii) allow JHU an opportunity to comment and advise Company in advance of any patent filings or major prosecution events. Notwithstanding the foregoing, if JHU disagrees with Company regarding the prosecution strategy Company is pursuing with respect to a NEOCHONDROGENESIS CLAIM and the parties are unable to resolve such disagreement despite their using good faith efforts to do so, JHU shall have the right to refer such dispute to a mutually selected neutral third party for resolution. Company shall reasonably consider all comments and advice provided by JHU. If at any time Company determines that it does not wish to file a patent application in any particular country or to pay the expenses associated with prosecuting or maintaining any patent application or patent within the JOINTLY OWNED

PATENT RIGHTS in any particular country, Company shall provide JHU with written notice at least thirty (30) days in advance of any filing or response deadline, or fee due date. Upon such notification, JHU may file, prosecute, and/or maintain such patent applications or patent in such country at its own expense. If JHU elects to exercise its back-up rights under the preceding sentence to file, prosecute or maintain any patent application or patent within JOINTLY OWNED PATENT RIGHTS in a Major Country, Company's license with respect to such patent applications or patent shall terminate in such country. As used in this subsection 4.1(a), "Major Country" shall mean the United States, Canada, United Kingdom, France, Germany, Italy, Spain, Australia and Japan.

(b) JHU, at Company's expense, shall file, prosecute and maintain all patents and patent applications within the PATENT RIGHTS that are solely owned by JHU ("JHU OWNED PATENT RIGHTS") using counsel of JHU's choice reasonably acceptable to Company and, subject to the terms and conditions of this Agreement, Company shall be licensed thereunder. Title to all such patents and patent applications shall reside in JHU. JHU shall have control over all patent matters in connection with the JHU OWNED PATENT RIGHTS, provided however, that JHU shall (i) cause its patent counsel to timely copy Company on all correspondence regarding strategy, filing and prosecution of all patents and patent applications within the PATENT RIGHTS, between JHU's patent counsel and JHU and/or any patent office, including without limitation all official actions and written correspondence with any patent office, and (ii) allow Company an opportunity to comment and advise JHU in advance of any patent filings or major prosecution events. JHU shall consider and reasonably incorporate all comments and advice unless detrimental to JHU's intellectual property rights. By concurrent written notification to JHU and its patent counsel at least thirty (30) days in advance (or later at JHU's discretion) of any filing or response deadline, or fee due date, Company may elect not to have a patent application filed in any particular country or not to pay expenses associated with prosecuting or maintaining any patent application or patent, provided that Company pays for all costs incurred up to JHU's receipt of such notification. Failure to provide such notification can be considered by JHU to be Company's authorization to proceed at Company's expense. Upon such notification, JHU may file, prosecute, and/or maintain such patent applications or patent in such country at its own expense and for its own benefit, and in the event the affected patent applications or patents are in a Major Country, the rights or license granted hereunder held by Company, AFFILIATED COMPANIES or SUBLICENSEE(S) relating to such patent applications or patent shall terminate in such Major Country.

4.2 **Notification**. Each party will notify the other promptly in writing when any infringement by another is uncovered or suspected.

4.3 **Infringement**. Company shall have the first right to enforce any patent within PATENT RIGHTS against any infringement or alleged infringement thereof, and, if such enforcement action is against a COMPETING PRODUCT, shall at all times keep JHU informed as to the status thereof. Before Company commences an action with respect to any infringement of such patents, Company shall give careful consideration to the views of JHU and to potential effects on the public interest in making its decision whether or not to sue. Thereafter, Company may, at its own expense, institute suit against any such infringer or alleged infringer and control and defend such suit in a manner consistent with the terms and provisions hereof and recover any damages, awards or settlements resulting therefrom, subject to Paragraph 4.5. If required by law,

JHU shall permit action under this Paragraph to be brought in its name, including being joined as party-plaintiff. However, no settlement, consent judgment or other voluntary final disposition of the suit against a COMPETING PRODUCT that concedes the invalidity or unenforceability of any patent within PATENT RIGHTS may be entered into without the prior written consent of JHU, which consent shall not be unreasonably withheld. This right to sue for infringement shall not be used in an arbitrary or capricious manner. JHU shall reasonably cooperate in any such litigation at Company's expense. Company may delegate its right to enforce the PATENT RIGHTS under this Paragraph 4.3 to AFFILIATED COMPANIES or SUBLICENSEES, provided that such AFFILIATED COMPANIES and SUBLICENSEES agree to comply with the applicable terms of this Paragraph 4.3.

If within ninety (90) days following a request by JHU that Company take action to abate any commercially significant infringement of a patent within the JHU OWNED PATENT RIGHTS by a COMPETING PRODUCT, such infringing activity has not been abated and if Company has not brought suit against the infringer or begun negotiations regarding the terms under which Company would grant a sublicense to the infringer, then JHU may, in its sole judgment and at its own expense, take steps to enforce any patent within the JHU OWNED PATENT RIGHTS against such COMPETING PRODUCT and control, settle, and defend such suit in a manner consistent with the terms and provisions hereof, and recover, for its own account, any damages, awards or settlements resulting therefrom. However, no settlement, consent judgment or other voluntary final disposition of the suit that concedes the invalidity or unenforceability of any patent within PATENT RIGHTS may be entered into without the prior written consent of Company, which consent shall not be unreasonably withheld. As used in this Article 4, "COMPETING PRODUCT" means a product for treatment of osteoarthritis sold by a third party without authorization from Company, the manufacture, use or sale of which would infringe one or more claims of an issued valid patent within the PATENT RIGHTS.

4.4 Patent Invalidity Suit. If a declaratory judgment action is brought naming Company as a defendant and alleging invalidity of any of the JHU OWNED PATENT RIGHTS, JHU may elect to take over the sole defense of the action at its own expense. Each Party shall cooperate fully with the other in connection with any such action.

4.5 Recovery. In the event of a recovery by Company pursuant to any enforcement action brought by Company under Paragraph 4.3 against a COMPETING PRODUCT, Company shall, to the extent that there is at the time such recovery is obtained a pending or issued NEOCHONDROGENSIS CLAIM, pay to JHU [***] percent ([***]%) of the recovery, net of all reasonable costs and expenses associated with each suit or settlement. If the cost and expenses of such action exceed the recovery, then [***] ([***]) of the excess shall be credited against royalties payable by Company to JHU hereunder in connection with sales of ROYALTY PRODUCTS covered in the PATENT RIGHTS which are the subject of the infringement suit, in the country of such legal proceedings, provided, however, that any such credit under this Paragraph shall not exceed [***] percent ([***]%) of the royalties otherwise payable to JHU with regard to sales in the country of such action in any one calendar year, with any excess credit being carried forward to future calendar years.

4.6 Cooperation. Each party agrees to cooperate in any action under this Article which is controlled by the other party, provided that the controlling party reimburses the cooperating

party promptly for any costs and expenses incurred by the cooperating party in connection with providing such assistance.

ARTICLE 5
OBLIGATIONS OF THE PARTIES

5.1 **Reports**. Company shall provide to JHU the following written reports according to the following schedules.

(a) Company shall provide quarterly Royalty Reports, substantially in the format of Exhibit B and due within sixty (60) days of the end of each calendar quarter following the first commercial sale of a ROYALTY PRODUCT by Company, an AFFILIATED COMPANY or a SUBLICENSEE(S). Royalty Reports shall disclose (i) the amount of ROYALTY PRODUCT(S) sold, the total NET SALES of such ROYALTY PRODUCT(S) received by Company, AFFILIATED COMPANIES and SUBLICENSEES, and the running royalties due to JHU as a result of NET SALES by Company and AFFILIATED COMPANIES thereof, and (ii) the amount of PARTNERSHIP PROCEEDS received and the percentage thereof payable to JHU pursuant to Paragraph 3.3. Payment of any such royalties and percentage of PARTNERSHIP PROCEEDS due shall accompany such Royalty Reports.

(b) Until Company, an AFFILIATED COMPANY or a SUBLICENSEE(S) has achieved a first commercial sale of a LICENSED PRODUCT, or received FDA market approval, Company shall provide semiannual Diligence Reports, due within sixty (60) days of the end of every June and December following the EFFECTIVE DATE of this Agreement. These Diligence Reports shall describe Company's, AFFILIATED COMPANIES' and any SUBLICENSEE(S)'s technical efforts towards meeting its obligations under the terms of this Agreement.

(c) Company shall provide Annual Reports within sixty (60) days of the end of every December following the EFFECTIVE DATE of this Agreement. Annual Reports shall include:

(i) evidence of insurance as required under Paragraph 10.4, or, a statement of why such insurance is not currently required, and

(ii) identification of all AFFILIATED COMPANIES which have exercised rights pursuant to Paragraph 2.1, or, a statement that no AFFILIATED COMPANY has exercised such rights, and

(iii) notice of all FDA approvals of any LICENSED PRODUCT(S) obtained by COMPANY, AFFILIATED COMPANY or SUBLICENSEE, the patent(s) or patent application(s) licensed under this Agreement upon which such product is based, and the commercial name of such product, or, in the alternative, a statement that no FDA approvals have been obtained.

5.2 **Records**. Company shall make and retain, for a period of three (3) years following the period of each report required by Paragraph 5.1, true and accurate records, files and books of account containing all the data reasonably required for the full computation and verification of sales and other information required in Paragraph 5.1. Such books and records shall be in accordance with generally accepted accounting principles consistently applied. Company shall permit the inspection of such records, files and books of account by an independent certified public accountant selected by JHU and acceptable to Company in its reasonable judgment during regular

business hours upon ten (10) business days' written notice to Company. Such inspection shall not be made more than once each calendar year. All costs of such inspection shall be paid by JHU, provided that if any such inspection shall reveal that an error in Company's favor has been made in the amount of payments hereunder for any calendar year equal to five percent (5%) or more of such payments, such costs shall be borne by Company.

5.3 Commercially Reasonable Efforts. Company shall exercise commercially reasonable efforts to develop and to introduce the LICENSED PRODUCT(S) into the commercial market, through itself, its AFFILIATED COMPANIES and/or its SUBLICENSEE(S), consistent with sound and reasonable business practice and judgment.

Following the introduction of a LICENSED PRODUCT into the commercial market, and until the expiration or termination of this Agreement, Company shall endeavor to keep LICENSED PRODUCT(S) reasonably available to the public consistent with sound and reasonable business practice and judgment.

5.4 Patent Acknowledgement. Company agrees that all packaging containing individual LICENSED PRODUCT(S) sold by Company, AFFILIATED COMPANIES and SUBLICENSEE(S) of Company will be marked with the number of the applicable patent(s) licensed hereunder in accordance with each country's patent laws to the extent reasonably practical.

ARTICLE 6
REPRESENTATIONS

6.1 Duties of the Parties. JHU is not a commercial organization. It is an institute of research and education. Therefore, JHU has no ability to evaluate the commercial potential of any PATENT RIGHTS or LICENSED PRODUCT or other license or rights granted in this Agreement. It is therefore incumbent upon Company to evaluate the rights and products in question, to examine the materials and information provided by JHU, and to determine for itself the validity of any PATENT RIGHTS, its freedom to operate, and the value of any LICENSED PRODUCTS or other rights granted.

6.2 Representations by JHU. JHU warrants that (a) it has good and marketable title to its interest in the inventions claimed under PATENT RIGHTS with the exception of certain retained rights of the United States Government, which may apply if any part of the JHU research was funded in whole or in part by the United States Government and (b) that Johns Hopkins Technology Ventures has not granted any rights or licenses that may conflict with the rights and licenses granted herein. JHU does not warrant the validity of any patents or that practice under such patents shall be free of infringement. EXCEPT AS EXPRESSLY SET FORTH IN THIS PARAGRAPH 6.2, (I) COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) AGREE THAT THE PATENT RIGHTS ARE PROVIDED "AS IS", AND THAT JHU MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PERFORMANCE OF LICENSED PRODUCT(S) INCLUDING THEIR SAFETY, EFFECTIVENESS, OR COMMERCIAL VIABILITY, AND (II) JHU DISCLAIMS ALL WARRANTIES WITH REGARD TO PRODUCT(S) LICENSED UNDER THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, ALL WARRANTIES, EXPRESSED OR IMPLIED, OF

MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, JHU ADDITIONALLY DISCLAIMS ALL OBLIGATIONS AND LIABILITIES ON THE PART OF JHU AND INVENTORS, FOR DAMAGES, INCLUDING, BUT NOT LIMITED TO, DIRECT, INDIRECT, SPECIAL, AND CONSEQUENTIAL DAMAGES, ATTORNEYS' AND EXPERTS' FEES, AND COURT COSTS (EVEN IF JHU HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, FEES OR COSTS), ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, USE, OR SALE OF THE PRODUCT(S) LICENSED UNDER THIS AGREEMENT. COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) ASSUME ALL RESPONSIBILITY AND LIABILITY FOR LOSS OR DAMAGE CAUSED BY A PRODUCT MANUFACTURED, USED, OR SOLD BY COMPANY, ITS SUBLICENSEE(S) AND AFFILIATED COMPANIES WHICH IS A LICENSED PRODUCT AS DEFINED IN THIS AGREEMENT.

ARTICLE 7
INDEMNIFICATION

7.1 Indemnification. JHU and the Inventors would have no legal liability exposure to third parties if JHU did not license the LICENSED PRODUCT(S), and any royalties JHU and the Inventors may receive is not adequate compensation for such legal liability exposure. Therefore, JHU requires Company to protect JHU and Inventors from such exposure to the same manner and extent to which insurance, if available, would protect JHU and Inventors. Furthermore, JHU and the Inventors will not, under the provisions of this Agreement or otherwise, have control over the manner in which Company or its AFFILIATED COMPANIES or its SUBLICENSEE(S) or those operating for its account or third parties who purchase LICENSED PRODUCT(S) from any of the foregoing entities, develop, manufacture, market or practice the inventions of LICENSED PRODUCT(S). Therefore, Company, AFFILIATED COMPANY and SUBLICENSEE, each solely with respect to its own practice of such Inventions, shall indemnify, defend with counsel reasonably acceptable to JHU, and hold JHU, The Johns Hopkins Health Systems, their present and former trustees, officers, Inventors of PATENT RIGHTS, agents, faculty, employees and students harmless as against any judgments, fees, expenses, or other costs arising from or incidental to any product liability or other lawsuit, claim, demand or other action brought by a third party as a consequence of its own practice of said inventions, whether or not JHU or said Inventors, either jointly or severally, is named as a party defendant in any such lawsuit and whether or not JHU or the Inventors are alleged to be negligent or otherwise responsible for any injuries to persons or property, except and to the extent that such judgments, fees, expenses or other costs arise from or are related to (i) an alleged breach by JHU of any of the representations or warranties set forth in Paragraph 6.2, or (ii) JHU having granted conflicting rights under the PATENT RIGHTS to a third party. Practice of the inventions covered by LICENSED PRODUCT(S), by an AFFILIATED COMPANY, SUBLICENSEE, or an agent or a third party on behalf of or for the account of Company or by a third party who purchases LICENSED PRODUCT(S) from Company, shall be considered Company's practice of said inventions for purposes of this Paragraph. The obligation of Company to defend and indemnify as set out in this Paragraph shall survive the termination of this Agreement, shall continue even after assignment of rights and responsibilities to an affiliate or sublicensee, and shall not be limited by any other limitation of liability elsewhere in this Agreement. JHU shall (a) provide prompt written notice to Company of any claim, demand or action arising out of the indemnified activities after JHU has knowledge of such claim, demand

or action; (b) permit Company to assume full responsibility to investigate, prepare for and defend against any such claim or demand; (c) assist Company, at Company's reasonable expense, in the investigation of, preparation for and defense of any such claim or demand; and (d) not compromise or settle such claim or demand without Company's written consent.

ARTICLE 8
CONFIDENTIALITY

8.1 **Confidentiality**. If necessary, the parties will exchange information, which they consider to be confidential. The recipient of such information agrees to accept the disclosure of said information which is marked as confidential at the time it is sent to the recipient, and to employ all reasonable efforts to maintain such information ("Confidential Information") secret and confidential, such efforts to be no less than the degree of care employed by the recipient to preserve and safeguard its own confidential information, and in any event no less than a reasonable degree of care. Except in connection with the activities contemplated by this Agreement, Confidential Information disclosed by a party to the other party shall not be used by the receiving party and shall not be disclosed or revealed to anyone except employees, consultants, collaborators, investors and prospective investors of the recipient who have a need to know the information and who have entered into a secrecy agreement with the recipient under which such employees are required to maintain confidential the proprietary information of the recipient and such employees shall be advised by the recipient of the confidential nature of the information and that the information shall be treated accordingly.

The obligations of this Paragraph 8.1 shall also apply to AFFILIATED COMPANIES and/or SUBLICENSEE(S) provided such information of JHU by Company. JHU's, Company's, AFFILIATED COMPANIES, and SUBLICENSEES' obligations under this Paragraph 8.1 shall extend until three (3) years after the termination of this Agreement.

8.2 **Exceptions**. The recipient's obligations under Paragraph 8.1 shall not extend to any part of the information:

a. that can be demonstrated to have been in the public domain or publicly known and readily available to the trade or the public prior to the date of the disclosure; or

b. that can be demonstrated, from written records to have been in the recipient's possession or readily available to the recipient from another source not under obligation of secrecy to the disclosing party prior to the disclosure; or

c. that becomes part of the public domain or publicly known by publication or otherwise, not due to any unauthorized act by the recipient; or

d. that is demonstrated from written records to have been developed by or for the receiving party without reference to confidential information disclosed by the disclosing party.

8.3 **Permitted Use**. The receiving party may use or disclose Confidential Information of the disclosing party to the extent necessary to exercise its rights hereunder (including in the case of Company, commercialization and/or sublicensing of LICENSED PRODUCTS) or fulfill its obligations and/or duties hereunder and in filing for, prosecuting or maintaining any proprietary rights, prosecuting or defending litigation, complying with applicable governmental regulations and/or submitting information to tax, regulatory agencies or other governmental authorities; provided that if the receiving party is required by law to make any public disclosures of Confidential Information of the disclosing party, to the extent it may legally do so, it will give reasonable advance notice to the disclosing party of such disclosure and will use its reasonable efforts to secure confidential treatment of Confidential Information prior to its disclosure (whether through protective orders or otherwise).

8.4 **Confidential Terms**. Except as expressly provided herein, each party agrees not to disclose any terms of this Agreement to any third party without the consent of the other party, except (a) as required by securities or other applicable laws or by the disclosure requirements of any securities exchange or other stock market on which a party's securities are or are to be traded, (b) to prospective and other investors, SUBLICENSEES and acquirers and (c) to such party's accountants, attorneys and other professional advisors. Additionally, Company consents to (i) JHU's disclosure of the terms and conditions of this Agreement to all INVENTORS upon their request, and (ii) JHU's acknowledging to third parties the existence of this Agreement and the extent of the licenses granted to LICENSEE and AFFILIATES under Article 3 hereof.

8.5 **Right to Publish**. JHU may publish manuscripts, abstracts or the like describing the inventions disclosed in the PATENT RIGHTS, subject to the terms set forth below. To avoid loss of patent rights as a result of premature public disclosure of patentable information and/or inadvertent disclosure of Company CONFIDENTIAL INFORMATION, JHU agrees to submit to Company, at least sixty (60) days prior to submission for publication or disclosure, materials intended for publication or disclosure describing the inventions disclosed in the PATENT RIGHTS. Company shall notify JHU within thirty (30) days of receipt of such materials whether or not Company (a) desires to file (or have filed) pursuant to Paragraph 4.1 a patent application on any invention disclosed in such materials to in order to protect such invention(s) in advance of publication or public disclosure or (b) believes that such materials contain CONFIDENTIAL INFORMATION of Company that Company wishes to have removed from the publication. In the event that Company informs JHU within such thirty (30) day period that it desires to file (or have filed) a patent application on any invention disclosed in such materials, JHU agrees to withhold publication and disclosure of such materials until such time as (i) a patent application claiming and disclosing such invention has been filed or, (ii) sixty (60) days have elapsed since the materials intended for publication or disclosure were submitted to Company for review, whichever occurs first. In the event that within such thirty (30) day period Company requests that JHU remove Company's CONFIDENTIAL INFORMATION from such materials, JHU agrees to remove all CONFIDENTIAL INFORMATION identified by Company prior to making such filing or disclosure. Subject to foregoing, JHU and Inventors shall be free to publish manuscripts and abstracts or the like directed to work done at JHU related to the PATENT RIGHTS, KNOW-HOW AND MATERIALS.

ARTICLE 9
TERM & TERMINATION

9.1 **Term**. The term of this Agreement shall commence on the EFFECTIVE DATE and shall continue, in each country, until the date of expiration of the last to expire patent included within PATENT RIGHTS in that country or if no patents issue then for a term of twenty (20) years from the EFFECTIVE DATE of this Agreement. Company's license to the KNOW-HOW AND MATERIALS, as well as Company's right to use JHU confidential information under Paragraph 8.1, shall survive the expiration, (but not an earlier termination) of this Agreement.

9.2 **Termination By Either Party**. This Agreement may be terminated by either party, in the event that the other party (a) files or has filed against it a petition under the Bankruptcy Act that is not dismissed within sixty (60) days, makes an assignment for the benefit of creditors, has a receiver appointed for it or a substantial part of its assets and such receivership is not terminated within sixty (60) days, or otherwise takes advantage of any statute or law designed for relief of debtors or (b) fails to perform or otherwise breaches any of its obligations hereunder, if, following the giving of notice by the terminating party of its intent to terminate and stating the grounds therefor, the party receiving such notice shall not have cured the failure or breach within sixty (60) days; provided, however, that in the event the party receiving the notice disputes the alleged failure to perform or breach in good faith, such sixty (60) day cure period shall commence upon determination by a court of competent jurisdiction (or arbitrator if the parties agree to arbitrate the matter) that the alleged failure to perform or breach exists. In no event, however, shall such notice or intention to terminate be deemed to waive any rights to damages or any other remedy which the party giving notice of breach may have as a consequence of such failure or breach.

9.3 **Termination by Company**. Company may terminate this Agreement and the license granted herein, for any reason, upon giving JHU ninety (90) days written notice. Company may terminate its license with respect to any particular patent or patent application, or as to any particular LICENSED PRODUCT, with 60 days' notice to JHU. From and after the effective date of a termination under this Paragraph 9.3 with respect to a particular patent or application, such patent(s) and patent application(s) in the particular country shall cease to be within the PATENT RIGHTS for all purposes of this Agreement, and all rights and obligations of Company under this Agreement with respect to such patent(s) and patent application(s) shall terminate and Exhibit D shall be considered amended accordingly. Company will not be required to reimburse JHU for patent costs incurred after the 60-day notice period for such patents or patent applications. From and after the effective date of a termination under this Paragraph 9.3 with respect to a particular LICENSED PRODUCT, the license granted under Paragraph 2.1 above shall terminate with respect to such LICENSED PRODUCT, and the same shall cease to be a LICENSED PRODUCT for all purposes of this Agreement. Upon a termination of this Agreement in its entirety under this Paragraph 9.3, all rights and obligations of the parties shall terminate, except as provided in Paragraph 9.4 below.

9.4 **Obligations and Duties upon Termination**. If this Agreement is terminated, both parties shall be released from all obligations and duties imposed or assumed hereunder to the extent so terminated, except as expressly provided to the contrary in this Agreement. Upon termination, both parties shall cease any further use of the confidential information disclosed to the receiving party by the other party. Termination of this Agreement, for whatever reason, shall not affect the

obligation of either party to make any payments for which it is liable prior to or upon such termination. Termination shall not affect JHU's right to recover unpaid royalties, fees, reimbursement for patent expenses, or other forms of financial compensation incurred prior to termination. Upon termination Company shall submit a final royalty report to JHU and any royalty payments, fees, unreimbursed patent expenses and other financial compensation due JHU shall become immediately payable. Notwithstanding any other provision of this Agreement, upon termination of this Agreement, any sublicenses granted in accordance with Paragraph 2.2 shall survive and, upon request, each SUBLICENSEE shall become a direct licensee of JHU, provided that JHU's obligations to SUBLICENSEE(S) are no greater than JHU's obligations to Company under this Agreement and that such SUBLICENSEE'S obligations to JHU shall be no greater than Company's obligations to JHU under this Agreement. Company shall provide written notice of such to each SUBLICENSEE(S) with a copy of such notice provided to JHU.

ARTICLE 10
MISCELLANEOUS

10.1 Use of Name.

10.1.1 Except as specifically permitted in Sections 16.2.3, 16.2.4 and 16.2.5 below, nothing contained in this Agreement confers any right to either party hereto to use in advertising, publicity, or other promotional activities any name, trade name, trademark, or other designation of the other party hereto (including any contraction, abbreviation or simulation of any of the foregoing).

10.1.2 Unless otherwise required by law, LICENSEE is prohibited from using the name "The Johns Hopkins University" or the name of any affiliate of the Johns Hopkins University, including but not limited to The Johns Hopkins Health System Corporation, or any of its hospitals or affiliates, or the names of any of their respective faculty, employees, students or INVENTORS, in advertising, publicity, or other promotional activities, without JHU's prior written approval of such use.

10.1.3 LICENSEE hereby grants JHU permission to include LICENSEE's name and a link to LICENSEE's website in JHU's annual reports and on JHU's website to showcase technology transfer-related stories.

10.1.4 JHU shall have the right to list LICENSEE and display the logotype or symbol of LICENSEE on JHU's website and on JHU publications as a licensee startup company based upon JHU technology.

10.2 No Partnership. Nothing in this Agreement shall be construed to create any agency, employment, partnership, joint venture or similar relationship between the parties other than that of a licensor/licensee. Neither party shall have any right or authority whatsoever to incur any liability or obligation (express or implied) or otherwise act in any manner in the name or on the behalf of the other, or to make any promise, warranty or representation binding on the other.

10.3 **Notice of Claim**. Each party shall give the other or its representative immediate notice of any suit or action filed, or prompt notice of any claim made, against them arising out of the performance of this Agreement or arising out of the practice of the inventions licensed hereunder.

10.4 **Product Liability**. Prior to initial human testing or first commercial sale of any LICENSED PRODUCT(S) as the case may be in any particular country, Company shall establish and maintain, covering the Company's liability in each country in which Company, an AFFILIATED COMPANY or SUBLICENSEE(S) shall test or sell LICENSED PRODUCT(S), product liability or other appropriate insurance coverage in the minimum amount of [***] ($[***]) per claim and will annually present evidence to JHU that such coverage is being maintained. Upon JHU's request, Company will furnish JHU with a Certificate of Insurance of each product liability insurance policy obtained. JHU shall be listed as an additional insured in Company's said insurance policies. If such Product Liability insurance is underwritten on a 'claims made' basis, Company agrees that any change in underwriters during the term of this Agreement will require the purchase of 'prior acts' coverage to ensure that coverage will be continuous throughout the term of this Agreement.

10.5 **Governing Law**. This Agreement shall be construed, and legal relations between the parties hereto shall be determined, in accordance with the laws of the State of Maryland applicable to contracts solely executed and wholly to be performed within the State of Maryland without giving effect to the principles of conflicts of laws. Any disputes between the parties to this Agreement shall be brought in the state or federal courts of Maryland. Both parties agree to waive their right to a jury trial.

10.6 **Notice**. All notices or communication required or permitted to be given by either party hereunder shall be deemed sufficiently given if mailed by registered mail or certified mail, return receipt requested, or sent by overnight courier providing evidence of delivery, such as Federal Express, to the other party at its respective address set forth below or to such other address as one party shall give notice of to the other from time to time hereunder. Mailed notices shall be deemed to be received on the third business day following the date of mailing. Notices sent by overnight courier shall be deemed received the following business day.

If to Company: Unity Biotechnology, Inc.
3280 Brisbane Blvd
Brisbane CA 94005
Attn: CEO
(415) 328-5504

If to JHU: Director
Technology Ventures
Johns Hopkins University
100 N. Charles Street
5th Floor
Baltimore, MD 21201
Attn: Agrmt A30652

10.7 Compliance with All Laws. In all activities undertaken pursuant to this Agreement, both JHU and Company covenant and agree that each will in all material respects comply with such Federal, state and local laws and statutes, as may be in effect at the time of performance and all valid rules, regulations and orders thereof regulating such activities.

10.8 Successors and Assigns. Neither this Agreement nor any of the rights or obligations created herein, except for the right to receive any remuneration hereunder, may be assigned by either party, in whole or in part, without the prior written consent of the other party, except that either party shall be free to assign this Agreement in connection with its merger or consolidation or any sale of substantially all of its assets without the consent of the other. This Agreement shall bind and inure to the benefit of the successors and permitted assigns of the parties hereto.

10.9 No Waivers; Severability. No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or other provision of this Agreement, and no waiver shall be effective unless made in writing. Any provision hereof prohibited by or unenforceable under any applicable law of any jurisdiction shall as to such jurisdiction be deemed ineffective and deleted herefrom without affecting any other provision of this Agreement. It is the desire of the parties hereto that this Agreement be enforced to the maximum extent permitted by law, and should any provision contained herein be held by any governmental agency or court of competent jurisdiction to be void, illegal and unenforceable, the parties shall negotiate in good faith for a substitute term or provision which carries out the original intent of the parties.

10.10 Entire Agreement; Amendment. Company and JHU acknowledge that they have read this entire Agreement and that this Agreement, including the attached Exhibits constitutes the entire understanding and contract between the parties hereto and supersedes any and all prior or contemporaneous oral or written communications with respect to the subject matter hereof, all of which communications are merged herein. It is expressly understood and agreed that (i) there being no expectations to the contrary between the parties hereto, no usage of trade, verbal agreement or another regular practice or method dealing within any industry or between the parties hereto shall be used to modify, interpret, supplement or alter in any manner the express terms of this Agreement; and (ii) this Agreement shall not be modified, amended or in any way altered except by an instrument in writing signed by both of the parties hereto.

10.11 Delays or Omissions. Except as expressly provided herein, no delay or omission to exercise any right, power or remedy accruing to any party hereto, shall impair any such right, power or remedy to such party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or in any similar breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

10.12 Force Majeure. If either party fails to fulfill its obligations hereunder (other than an obligation for the payment of money), when such failure is due to an act of God, or other

circumstances beyond its reasonable control, including but not limited to fire, flood, civil commotion, riot, war (declared and undeclared), revolution, or embargoes, then said failure shall be excused for the duration of such event and for such a time thereafter as is reasonable to enable the parties to resume performance under this Agreement, provided however, that in no event shall such time extend for a period of more than one hundred eighty (180) days.

10.13 Further Assurances. Each party shall, at any time, and from time to time, prior to or after the EFFECTIVE DATE of this Agreement, at reasonable request of the other party, execute and deliver to the other such instruments and documents and shall take such actions as may be required to more effectively carry out the terms of this Agreement.

10.14 Survival. All representations, warranties, covenants and agreements made herein and which by their express terms or by implication are to be performed after the execution and/or termination hereof, or are prospective in nature, shall survive such execution and/or termination, as the case may be. This shall include Paragraphs 3.7 (Late Payments), 5.2 (Records), and Articles 6, 7, 8, 9, and 10.

10.15 No Third Party Beneficiaries. Nothing in this Agreement shall be construed as giving any person, firm, corporation or other entity, other than the parties hereto and their successors and permitted assigns, any right, remedy or claim under or in respect of this Agreement or any provision hereof.

10.16 Headings. Article headings are for convenient reference and not a part of this Agreement. All Exhibits are incorporated herein by this reference.

10.17 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which when taken together shall be deemed but one instrument.

IN WITNESS WHEREOF, this Agreement shall take effect as of the EFFECTIVE DATE when it has been executed below by the duly authorized representatives of the parties.

THE JOHNS HOPKINS UNIVERSITY	**UNITY BIOTECHNOLOGY, INC.**
/s/ Neil Veloso	/s/ Nathaniel David
Neil Veloso	Nathaniel David
Executive Director	Title:
Johns Hopkins Technology Ventures	
11/3/2016	11/3/2016
(Date)	(Date)

I have read and agree to abide by the terms of this Agreement:

/s/ Jennifer Elisseeff
Dr. Jennifer Elisseeff

11/28/2016
Date

EXHIBIT A. LICENSE FEE & ROYALTIES.
EXHIBIT B. SALES & ROYALTY REPORT FORM.
EXHIBIT C. INTENTIONALLY LEFT BLANK.
EXHIBIT D. PATENT APPLICATIONS.
EXHIBIT E. FORM OF STOCK ISSUANCE AGREEMENT

FEES & ROYALTIES

1. **Minimum Annual Royalties**: The minimum annual royalties pursuant to Paragraph 3.1 are twelve thousand dollars ($[***]).

2. **Royalties**: The running royalty rate payable by Company under Paragraph 3.2 for NET SALES of ROYALTY PRODUCTS by Company, AFFILIATED COMPANIES and SUBLICENSEES is:

Portion of Annual Sales	Royalty Rate
[***]	[***]
>[***]	[***]

For clarity, no royalty shall be payable with respect to NET SALES of ROYALTY PRODUCTS unless at such time as the applicable NET SALES accrue, there is within the PATENT RIGHTS either a U.S. or EP patent containing a NEOCHONDROGENESIS CLAIM.

If Company, its AFFILIATED COMPANY or SUBLICENSEE is required to pay a third party amounts with respect to a ROYALTY PRODUCT under agreements for patent rights or other technologies which Company, its AFFILIATED COMPANY or SUBLICENSEE, determines are necessary to license or acquire with respect to such ROYALTY PRODUCT, Company may deduct such amount owing to such third parties (prior to any reductions) from the royalty owing to JHU for the sale of such ROYALTY PRODUCT. Notwithstanding the foregoing, in no event shall the total aggregate amount payable to JHU in any royalty period be reduced to less than [***] percent ([***]%) of the amounts that would otherwise be due JHU in such royalty period, and (b) Company shall not be entitled to deduct any royalties or other payments made under the Existing Agreements. If, in any royalty period, Company is not able to fully recover its [***] percent ([***]%) portion of the payments due to a third party, it shall be entitled to carry forward such right of off-set to future semi-annual periods with respect to the excess amount. As used herein, “Existing Agreements means (a) that certain Exclusive License Agreement between Company and the Mayo Foundation for Medical Education and Research originally entered into by the parties effective June 28th, 2013; (b) that certain Exclusive License Agreement between Company and the Buck Institute for Research on Aging originally entered into by the parties effective February 3rd, 2014; (c) that certain Exclusive License Agreement between Company and the Board of Trustees of the University of Arkansas originally entered into by the parties effective April 28th, 2015, and (d) the Ascentage Agreements, where “Ascentage Agreements” means (i) that certain Compound Library and Option Agreement entered into by and between Company and Ascentage Pharma Group Corp. Ltd., (“Ascentage”) as of February 2nd, 2016, (ii) that certain APG-1252 License Agreement entered into by and between Company and Ascentage as of February 2nd, 2016, and (iii) any Compound License Agreements entered into by and between Company and Ascentage as of the Effective Date of the definitive license agreement or at any time thereafter.

3. **Partnership Proceeds**: The percent of PARTNERSHIP PROCEEDS payable under Paragraph 3.3 is [***]%, provided that:

Company shall only be obligated to share [***]% of that portion of the PARTNERSHIP PROCEEDS that exceeds the then current aggregate amount spent by Company on the development of the LICENSED PRODUCTS included in such sublicense as of the date such PARTNERSHIP PROCEEDS were received; and

Company's total payment obligations to JHU with respect to PARTNERSHIP PROCEEDS shall be capped at [***] U.S. Dollars (USD$[***]).

4. **Equity Grant**. Company shall issue to JHU 65,000 shares of Company common stock upon the first to occur of (i) acceptance for review by the U.S. Food and Drug Administration of a new drug application for a Royalty Product, or (ii) or acceptance for review by the European Medicines Agency of a marketing approval application for a Royalty Product. The events described in subsections (i) and (ii) above, each a "triggering event".

Notwithstanding the foregoing, if at the time of the occurrence of the triggering event, there is not either a U.S. or EP patent within the PATENT RIGHTS containing a NEOCHONDROGENESIS CLAIM, then the issuance of shares of Company common stock shall be deferred until such time as there is a NEOCHONDROGENESIS CLAIM.

5. **Milestones**. The milestones payable under Paragraph 3.5 are:

Approval Milestones

(i) [***] U.S. Dollars (USD$[***]) upon first receipt by Company, an AFFILIATED COMPANY or SUBLICENSEE of marketing approval for a ROYALTY PRODUCT from the U.S. Food and Drug Administration.

(ii) [***] U.S. Dollars (USD$[***]) upon first receipt by Company, an AFFILIATED COMPANY or SUBLICENSEE of marketing approval for a ROYALTY PRODUCT from the European Medicines Agency.

(iii) [***] U.S. Dollars (USD$[***]) upon first receipt by Company, an AFFILIATED COMPANY or SUBLICENSEE of marketing approval for a ROYALTY PRODUCT from the Ministry Health Labor and Welfare in Japan.

Notwithstanding the foregoing, in the event that at the time of achievement of one or more of the foregoing development milestones there is not either a U.S. or EP patent within the PATENT RIGHTS containing a NEOCHONDROGENESIS CLAIM, then payment of such milestones shall be deferred until such time as there is a NEOCHONDROGENESIS CLAIM.

Each of the foregoing development milestone payments shall be payable only once and the overall payments due with respect to the foregoing milestones shall in no event exceed [***] U.S. Dollars (USD$[***]).

Sales Milestones

(i) [***] U.S. Dollars (USD$[***]) upon the total annual royalty-bearing Net Sales for a ROYALTY PRODUCT on a worldwide basis first reaching $[***].

(ii) [***] U.S. Dollars (USD$[***]) upon the total annual royalty-bearing Net Sales for a ROYALTY PRODUCT on a worldwide basis first reaching $[***].

(iii) [***] U.S. Dollars (USD$[***]) upon the total annual royalty-bearing Net Sales for a ROYALTY PRODUCT on a worldwide basis first reaching $[***].

(iv) [***] U.S. Dollars (USD$[***]) upon the total annual royalty-bearing Net Sales for a ROYALTY PRODUCT on a worldwide basis first reaching $[***].

Each of the foregoing sales milestone payments shall be payable only once and the overall payments due with respect to the foregoing milestones shall in no event exceed [***] U.S. Dollars (USD$[***]).

QUARTERLY SALES & ROYALTY AND PARTNERSHIP PROCEEDS REPORT

FOR LICENSE AGREEMENT BETWEEN _____ AND

THE JOHNS HOPKINS UNIVERSITY DATED

_____

FOR PERIOD OF _____ TO _____

TOTAL ROYALTIES DUE FOR THIS PERIOD $_____

PRODUCT ID	PRODUCT NAME	*JHU REFERENCE	1st COMMERCIAL SALE DATE	TOTAL NET SALES	ROYALTY RATE	AMOUNT DUE

Report of Partnership Proceeds:

Name of Sublicensee:
Date of Sublicense:
Partnership Proceeds Received:
Amount due:

* Please provide the JHU Reference Number or Patent Reference

This report format is to be used to report quarterly royalty statements to JHU. It should be placed on Company letterhead and accompany any royalty payments due for the reporting period. This report shall be submitted even if no sales are reported.

EXHIBIT C – INTENTIONALLY LEFT BLANK

EXHIBIT D – PATENT APPLICATIONS

C13890 –

[***]

EXHIBIT E – FORM STOCK ISSUANCE AGREEMENT

UNITY BIOTECHNOLOGY, INC.
RESTRICTED STOCK ISSUANCE AGREEMENT

This Restricted Stock Issuance Agreement (the "Agreement") is made as of [ ], 20[ ] by and between Unity Biotechnology, Inc., a Delaware corporation (the "Company"), and The Johns Hopkins University, a Maryland corporation (the "Grantee"). Reference is made to that certain License Agreement effective as of [ ], 2016 by and between the Company and the Grantee (the "License Agreement"). Capitalized terms not otherwise defined herein shall have the applicable meaning in the License Agreement.
In consideration of the mutual covenants and representations set forth below, the Company and Grantee agree as follows:

1. ***Grant of the Shares*****. Subject to the terms and conditions of this Agreement, the Company agrees to grant to Grantee, and Grantee agree to acquire from the Company, on the Closing (as defined below) [65,000] shares of the Company's Common Stock, $0.0001 par value per share (the "Shares"). The number of shares is in full and complete satisfaction of the Company's obligations under Section 3.4 of the License Agreement for achievement of the following Milestone Event: [INSERT MILESTONE EVENT].**

2. ***Closing*****. The transfer of the Shares shall occur at a closing (the "Closing") to be held on the date first set forth above, or at any other time mutually agreed upon by the Company and Grantee. The Closing will take place at the principal office of the Company or at such other place as shall be designated by the Company. As promptly after the Closing as practicable, the Company will issue a stock certificate, registered in the name of Grantee, reflecting the Shares.**

3. ***Restrictions on Transfer*****.**

A. ***Investment Representations and Legend Requirements. The Grantee hereby make the investment representations listed on Exhibit A to the Company as of the date of this Agreement and as of the date of the Closing, and agrees that such representations are incorporated into this Agreement by this reference, such that the Company may rely on them in issuing the Shares. Grantee understand and agree that the Company shall cause the legends set forth below, or substantially equivalent legends, to be placed upon any certificate(s) evidencing ownership of the Shares, together with any other legends that may be required by the Company or by applicable state or federal securities laws:***

> **THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SUCH ACT AND/OR APPLICABLE STATE SECURITIES LAWS, OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL OR OTHER EVIDENCE, REASONABLY SATISFACTORY TO THE COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.**

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER, A RIGHT OF FIRST REFUSAL, AND A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE RESTRICTED STOCK ISSUANCE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS, RIGHT OF FIRST REFUSAL AND LOCK-UP PERIOD ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

B. ***Stop-Transfer Notices. Grantee agree that to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.***

C. ***Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any acquirer or other transferee to whom such Shares shall have been so transferred.***

D. ***Lock-Up Period. Grantee hereby agree that Grantee shall not sell, offer, pledge, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, grant any right or warrant to purchase, lend or otherwise transfer or encumber, directly or indirectly, any Shares or other securities of the Company, nor shall Grantee enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Shares or other securities of the Company, during the period from the filing of the first registration statement of the Company filed under the Securities Act of 1933, as amended (the "Securities Act"), that includes securities to be sold on behalf of the Company to the public in an underwritten public offering under the Securities Act through the end of the 180-day period following the effective date of such registration statement (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the***

restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto). The obligations described in this section shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. Grantee further agree, if so requested by the Company or any representative of its underwriters, to enter into such underwriter's standard form of "lockup" or "market standoff" agreement in a form satisfactory to the Company and such underwriter. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of any such restriction period.

4. *Company's Right of First Refusal*. Before any Shares acquired by the Grantee pursuant to this Agreement (or any beneficial interest in such Shares) may be sold, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Grantee or any subsequent transferee (each a "Holder"), such Holder must first offer such Shares or beneficial interest to the Company and/or its assignee(s) as follows:

A. *Notice of Proposed Transfer. The Holder shall deliver to the Company a written notice stating: (i) the Holder's bona fide intention to sell or otherwise transfer the Shares; (ii) the name of each proposed transferee; (iii) the number of Shares to be transferred to each proposed transferee; (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares; and (v) that by delivering the notice, the Holder offers all such Shares to the Company and/or its assignee(s) pursuant to this section and on the same terms described in the notice.*

B. *Exercise of Right of First Refusal. At any time within 30 days after receipt of the Holder's notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the proposed transferees, at the purchase price determined in accordance with Section 4.C.*

C. *Purchase Price. The purchase price for the Shares purchased by the Company and/or its assignee(s) under this section shall be the price listed in the Holder's notice. If the price listed in the Holder's notice includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in its sole discretion.*

D. *Payment. Payment of the purchase price shall be made, at the option of the Company and/or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company and/or its assignee(s), or by any combination thereof within 30 days after receipt by the Company of the Holder's notice (or at such later date as is called for by such notice).*

E. *Holder's Right to Transfer. If all of the Shares proposed in the notice to be transferred to a given proposed transferee are not purchased by the Company and/or its assignee(s) as provided in this section, then the Holder may sell or otherwise transfer such Shares to that proposed transferee; provided that: (i) the transfer is made only on the terms provided for in the notice, with the exception of the purchase price, which may be either the price listed in the notice or any higher price; (ii) such transfer is consummated within 60 days after the date the notice is delivered to the Company; (iii) the transfer is effected in accordance with any applicable securities laws, and if requested by the Company, the Holder shall have*

delivered an opinion of counsel acceptable to the Company to that effect; and (iv) the proposed transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section. If any Shares described in a notice are not transferred to the proposed transferee within the period provided above, then before any such Shares may be transferred, a new notice shall be given to the Company, and the Company and/or its assignees shall again be offered the right of first refusal described in this section.

F. ***Exception for Certain Family Transfers. Notwithstanding anything to the contrary contained elsewhere in this section, the transfer of any or all of the Shares during the Holder's lifetime or on the Holder's death by will or intestacy to (i) the Holder's spouse; (ii) the Holder's lineal descendants or antecedents, siblings, aunts, uncles, cousins, nieces and nephews (including adoptive relationships and step relationships), and their spouses; (iii) the lineal descendants or antecedents, siblings, cousins, aunts, uncles, nieces and nephews of Holder's spouse (including adoptive relationships and step relationships), and their spouses; and (iv) a trust or other similar estate planning vehicle for the benefit of the Holder or any such person, shall be exempt from the provisions of this section; provided that, in each such case, the transferee agrees in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this section, and there shall be no further transfer of such Shares except in accordance with the terms of this section; and provided further, that without the prior written consent of the Company, which may be withheld in the sole discretion of the Company, no more than three transfers may be made pursuant to this section, including all transfers by the Holder and all transfers by any transferee.***

G. ***Termination of Right of First Refusal. The right of first refusal contained in this section shall terminate as to all Shares acquired hereunder upon the earlier of: (i) the closing date of the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act, and (ii) the closing date of a Change of Control pursuant to which the holders of the outstanding voting securities of the Company receive securities of a class registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended. For purposes of this Agreement, a "Change of Control" means either: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation or stock transfer, but excluding any such transaction effected primarily for the purpose of changing the domicile of the Company), unless the Company's stockholders of record immediately prior to such transaction or series of related transactions hold, immediately after such transaction or series of related transactions, at least 50% of the voting power of the surviving or acquiring entity (provided that the sale by the Company of its securities for the purposes of raising additional funds shall not constitute a Change of Control hereunder); or (ii) a sale of all or substantially all of the assets of the Company.***

5. ***General Provisions*.**

A. ***Choice of Law. This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of the State of California.***

B. ***Integration. This Agreement, including all exhibits hereto, together with the License Agreement, represents the entire agreement between the parties with respect to the acquisition of the Shares by the Grantee and supersedes and replaces any and all prior written***

or oral agreements regarding the subject matter of this Agreement and the License Agreement including, but not limited to, any representations made during any interviews, relocation discussions or negotiations whether written or oral.

C. ***Notices. Any notice, demand, offer, request or other communication required or permitted to be given by either the Company or the Grantee pursuant to the terms of this Agreement shall be in writing and shall be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one business day after being delivered by facsimile (with receipt of appropriate confirmation), (iv) one business day after being deposited with an overnight courier service or (v) four days after being deposited in the U.S. mail, First Class with postage prepaid and return receipt requested, and addressed to the parties at the addresses provided to the Company (which the Company agrees to disclose to the other parties upon request) or such other address as a party may request by notifying the other in writing.***

D. ***Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this section or which becomes bound by the terms of this Agreement by operation of law. Subject to the restrictions on transfer set forth in this Agreement, this Agreement shall be binding upon Grantee and their heirs, executors, administrators, successors and assigns.***

E. ***Assignment; Transfers. Except as set forth in this Agreement, this Agreement, and any and all rights, duties and obligations hereunder, shall not be assigned, transferred, delegated or sublicensed by the Grantee without the prior written consent of the Company. Any attempt by the Grantee without such consent to assign, transfer, delegate or sublicense any rights, duties or obligations that arise under this Agreement shall be void. Except as set forth in this Agreement, any transfers in violation of any restriction upon transfer contained in any section of this Agreement shall be void, unless such restriction is waived in accordance with the terms of this Agreement.***

F. ***Waiver. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, nor prevent that party from thereafter enforcing any other provision of this Agreement. The rights granted both parties hereunder are cumulative and shall not constitute a waiver of either party's right to assert any other legal remedy available to it.***

G. ***Grantee Investment Representations and Further Documents. The Grantee agree upon request to execute any further documents or instruments necessary or reasonably desirable in the view of the Company to carry out the purposes or intent of this Agreement, including (but not limited to) the applicable exhibits and attachments to this Agreement.***

H. ***Severability. Should any provision of this Agreement be found to be illegal or unenforceable, the other provisions shall nevertheless remain effective and shall remain enforceable to the greatest extent permitted by law.***

I. ***Rights as Stockholder. Subject to the terms and conditions of this Agreement, Grantee shall have all of the rights of a stockholder of the Company with respect to***

the Shares from and after the date that Grantee deliver a fully executed copy of this Agreement (including the applicable exhibits and attachments to this Agreement) and full payment for the Shares to the Company, and until such time as Grantee dispose of the Shares in accordance with this Agreement. Upon such transfer, Grantee shall have no further rights as a holder of the Shares so purchased except (in the case of a transfer to the Company) the right to receive payment for the Shares so purchased in accordance with the provisions of this Agreement, and Grantee shall forthwith cause the certificate(s) evidencing the Shares so purchased to be surrendered to the Company for transfer or cancellation.

J. ***Adjustment for Stock Split. All references to the number of Shares and the purchase price of the Shares in this Agreement shall be adjusted to reflect any stock split, stock dividend or other change in the Shares which may be made after the date of this Agreement.***

K. ***Reliance on Counsel and Advisors. Grantee acknowledge that Latham & Watkins LLP, is representing only the Company in this transaction. Grantee acknowledges that he or she has had the opportunity to review this Agreement, including all attachments hereto, and the transactions contemplated by this Agreement with his or her own legal counsel, tax advisors and other advisors. Grantee are relying solely on his or her own counsel and advisors and not on any statements or representations of the Company or its agents for legal or other advice with respect to this investment or the transactions contemplated by this Agreement.***

L. ***Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Facsimile copies of signed signature pages shall be binding originals.***

(Signature page follows)

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement.
COMPANY:
UNITY BIOTECHNOLOGY, INC.

By:
Name: Dr. Nathaniel E. David
Title: President and Chief Executive Officer

The parties represent that they have read this Agreement in its entirety, have had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understand this Agreement. The Grantee agrees to notify the Company of any change in its address below.

GRANTEE:
THE JOHNS HOPKINS UNIVERSITY

Name:
Title:

Address:

3400 N. Charles Street

Baltimore, Maryland, 21218-2695

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

EXHIBIT A to Stock Grant Agreement
INVESTMENT REPRESENTATION STATEMENT

GRANTEE : THE JOHNS HOPKINS UNIVERSITY
COMPANY : UNITY BIOTECHNOLOGY, INC.
SECURITY : COMMON STOCK

AMOUNT : [____] SHARES
DATE : [_____]

In connection with the acquisition of the above-listed shares, The Johns Hopkins University represents to the Company as follows. For the sake of convenience of the parties, "I," "me," and "my" refer to The Johns Hopkins University.

1. *The Company may rely on these representations*. I understand that the Company's sale of the shares to me has not been registered under the Securities Act of 1933, as amended (the "Securities Act"), because the Company believes, relying in part on my representations in this document, that an exemption from such registration requirement is available for such sale. I understand that the availability of this exemption depends upon the representations I am making to the Company in this document being true and correct.

2. *I am purchasing for investment*. I am purchasing the shares solely for investment purposes, and not for further distribution. My entire legal and beneficial ownership interest in the shares is being acquired and shall be held solely for my account, except to the extent I intend to hold the shares jointly with my spouse. I am not a party to, and do not presently intend to enter into, any contract or other arrangement with any other person or entity involving the resale, transfer, grant of participation with respect to or other distribution of any of the shares. My investment intent is not limited to my present intention to hold the shares for the minimum capital gains period specified under any applicable tax law, for a deferred sale, for a specified increase or decrease in the market price of the shares, or for any other fixed period in the future.

3. *I can protect my own interests*. I can properly evaluate the merits and risks of an investment in the shares and can protect my own interests in this regard, whether by reason of my own business and financial expertise, the business and financial expertise of certain professional advisors unaffiliated with the Company with whom I have consulted, or my preexisting business or personal relationship with the Company or any of its officers, directors or controlling persons.

4. *I am informed about the Company*. I am sufficiently aware of the Company's business affairs and financial condition to reach an informed and knowledgeable decision to acquire the shares. I have had opportunity to discuss the plans, operations and financial condition of the Company with its officers, directors or controlling persons, and have received all information I deem appropriate for assessing the risk of an investment in the shares.

5. *I recognize my economic risk*. I realize that the acquisition of the shares involves a high degree of risk, and that the Company's future prospects are uncertain. I am able to hold the shares indefinitely if required, and am able to bear the loss of my entire investment in the shares.

6. *I know that the shares are restricted securities*. I understand that the shares are "restricted securities" in that the Company's sale of the shares to me has not been registered

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

under the Securities Act in reliance upon an exemption for non-public offerings. In this regard, I also understand and agree that:

A. I must hold the shares indefinitely, unless any subsequent proposed resale by me is registered under the Securities Act, or unless an exemption from registration is otherwise available (such as Rule 144);

B. the Company is under no obligation to register any subsequent proposed resale of the shares by me; *and*

C. the certificate evidencing the shares will be imprinted with a legend which prohibits the transfer of the shares unless such transfer is registered or such registration is not required in the opinion of counsel for the Company.

7. *I am familiar with Rule 144*. I am familiar with Rule 144 adopted under the Securities Act, which in some circumstances permits limited public resales of "restricted securities" like the shares acquired from an issuer in a non-public offering. I understand that my ability to sell the shares under Rule 144 in the future is uncertain, and may depend upon, among other things: (i) the availability of certain current public information about the Company; (ii) the resale occurring more than a specified period after my acquisition and full payment (within the meaning of Rule 144) for the shares; and (iii) if I am an affiliate of the Company (A) the sale being made in an unsolicited "broker's transaction", transactions directly with a market maker or riskless principal transactions, as those terms are defined under the Securities Exchange Act of 1934, as amended, (B) the amount of shares being sold during any three-month period not exceeding the specified limitations stated in Rule 144, *and* (C) timely filing of a notice of proposed sale on Form 144, if applicable.

8. *I know that Rule 144 may never be available*. I understand that the requirements of Rule 144 may never be met, and that the shares may never be saleable under the rule. I further understand that at the time I wish to sell the shares, there may be no public market for the Company's stock upon which to make such a sale, or the current public information requirements of Rule 144 may not be satisfied, either of which may preclude me from selling the shares under Rule 144 even if the relevant holding period had been satisfied.

9. *I know that I am subject to further restrictions on resale*. I understand that in the event Rule 144 is not available to me, any future proposed sale of any of the shares by me will not be possible without prior registration under the Securities Act, compliance with some other registration exemption (which may or may not be available), or *each* of the following: (i) my written notice to the Company containing detailed information regarding the proposed sale, (ii) my providing an opinion of my counsel to the effect that such sale will not require registration, and (iii) the Company notifying me in writing that its counsel concurs in such opinion. I understand that neither the Company nor its counsel is obligated to provide me with any such opinion. I understand that although Rule 144 is not exclusive, the Staff of the SEC has stated that persons proposing to sell private placement securities other than in a registered offering or pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

10. *I know that I may have tax liability due to the uncertain value of the shares*. I understand that the Board of Directors believes its valuation of the shares represents a fair appraisal of their worth, but that it remains possible that, with the benefit of hindsight, the Internal Revenue Service may successfully assert that the value of the shares on the date of

my acquisition is substantially greater than the Board's appraisal. I understand that any additional value ascribed to the shares by such an IRS determination will constitute ordinary income to me as of the acquisition date, and that any additional taxes and interest due as a result will be my sole responsibility payable only by me, and that the Company need not and will not reimburse me for that tax liability.

11. ***Non-U.S. Investor*****. If I am not a United States person, I hereby represents that I am satisfied as to the full observance of the laws of my jurisdiction in connection with any invitation to receive the shares issuable pursuant to this Agreement, or any use of this Agreement, including (i) the legal requirements within my jurisdiction for the acquisition of the shares pursuant to this Agreement, (ii) any foreign exchange restrictions applicable to such receipt or transfer, (iii) any governmental or other consents that may need to be obtained and (iv) the income tax and other tax consequences, if any, that may be relevant to the acquisition, holding, redemption, sale or transfer of such securities. My subscription for, and my continued beneficial ownership of the shares will not violate any applicable securities or other laws of my jurisdiction.**

12. ***Principal Place of Business*****. The address of a principal place of business of The Johns Hopkins University is set forth on the signature page below.**

By signing below, the undersigned acknowledge their agreement with each of the statements contained in this Investment Representation Statement as of the date first set forth above, and their intent for the Company to rely on such statements in issuing the shares to me.

THE JOHNS HOPKINS UNIVERSITY

By:

Name:

Title:

Address of Grantee Principal Place of Business:

3400 N. Charles Street

Baltimore, Maryland, 21218-2695

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

Certificate Of Completion		
Envelope Id: 269313340F904A57A30CEB4D2A41F5C6		Status: Completed
Subject: Please DocuSign: A30652 JHU LIcense Agreement (final) VT1.pdf		
Source Envelope:		
Document Pages: 39	Signatures: 3	Envelope Originator:
Certificate Pages: 5	Initials: 2	[***] 3400 N Charles St Baltimore, MD 21218 [***] IP Address: [***]
AutoNav: Enabled		
EnvelopeId Stamping: Enabled		
Time Zone: (UTC-05:00) Eastern Time (US & Canada)		

Record Tracking		
Status: Original 11/2/2016 1:14:47 PM	Holder: [***] [***]	Location: DocuSign

Signer Events	**Signature**	**Timestamp**
[***]		Sent: 11/2/2016 1:21:40 PM
[***]		Viewed: 11/2/2016 1:21:44 PM
Agreement Management Coordinator		Signed: 11/2/2016 1:22:02 PM
Johns Hopkins University – Technology Ventures		
Security Level: Email, Account Authentication (None)	Using IP Address: [***]	
Electronic Record and Signature Disclosure: Not Offered via DocuSign ID:		
[***]		Sent: 11/2/2016 1:22:03 PM
[***]		Viewed: 11/2/2016 2:36:19 PM
Security Level: Email, Account Authentication (None)		Signed: 11/2/2016 2:36:38 PM
	Using IP Address: [***] Signed using mobile	
Electronic Record and Signature Disclosure: Accepted: 11/2/2016 2:36:19 PM ID: [***]		
Neil Veloso		Sent: 11/2/2016 2:36:39 PM
nveloso1@jhu.edu		Viewed: 11/3/2016 12:57:53 PM
Security Level: Email, Account Authentication (None)		Signed: 11/3/2016 1:01:08 PM
	Using IP Address: [***]	
Electronic Record and Signature Disclosure: Not Offered via DocuSign ID:		
Nathaniel David		Sent: 11/3/2016 1:01:10 PM
nathaniel.david@unitybiotechnology.com		Viewed: 11/3/2016 1:37:40 PM
Security Level: Email, Account Authentication (None)		Signed: 11/3/2016 1:38:11 PM
	Using IP Address: [***]	

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

Electronic Record and Signature Disclosure:
Accepted: 11/3/2016 1:37:40 PM
ID: [***]

Jennifer Elisseeff
jhe@jhu.edu
Security Level: Email, Account Authentication (None)

Sent: 11/3/2016 1:38:12 PM
Resent: 11/18/2016 7:19:39 AM
Viewed: 11/18/2016 10:17:02 AM
Signed: 11/18/2016 10:19:25 AM

Using IP Address: [***]

Electronic Record and Signature Disclosure:
Accepted: 11/1/2016 2:05:06 PM
ID: [***]

In Person Signer Events	Signature	Timestamp
Editor Delivery Events	**Status**	**Timestamp**
Agent Delivery Events	**Status**	**Timestamp**
Intermediary Delivery Events	**Status**	**Timestamp**
Certified Delivery Events	**Status**	**Timestamp**
Carbon Copy Events	**Status**	**Timestamp**
Notary Events		**Timestamp**

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	11/18/2016 7:19:39 AM
Certified Delivered	Security Checked	11/18/2016 10:17:02 AM
Signing Complete	Security Checked	11/18/2016 10:19:25 AM
Completed	Security Checked	11/18/2016 10:19:25 AM
Electronic Record and Signature Disclosure		

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10). Confidential treatment has been granted with respect to the omitted portions.**

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, Johns Hopkins University – Technology Ventures (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through your DocuSign, Inc. (DocuSign) Express user account. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to these terms and conditions, please confirm your agreement by clicking the 'I agree' button at the bottom of this document.

Getting paper copies

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. For such copies, as long as you are an authorized user of the DocuSign system you will have the ability to download and print any documents we send to you through your DocuSign user account for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a $0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of your DocuSign account. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use your DocuSign Express user account to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through your DocuSign user account all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact Johns Hopkins University - Technology Ventures:
You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: muntiet1@jhu.edu

To advise Johns Hopkins University – Technology Ventures of your new e-mail address
To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at muntiet1@jhu.edu and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..
In addition, you must notify DocuSign, Inc to arrange for your new email address to be reflected in your DocuSign account by following the process for changing e-mail in DocuSign.
To request paper copies from Johns Hopkins University – Technology Ventures
To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an e-mail to muntiet1@jhu.edu and in the body of such request you must state your e-mail address, full name, US Postal address, and telephone number. We will bill you for any fees at that time, if any.
To withdraw your consent with Johns Hopkins University – Technology Ventures
To inform us that you no longer want to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your DocuSign account, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an e-mail to muntiet1@jhu.edu and in the body of such request you must state your e-mail, full name, IS Postal Address, telephone number, and account number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process.

Required hardware and software

Operating Systems:	Windows2000? or WindowsXP?
Browsers (for SENDERS):	Internet Explorer 6.0? or above
Browsers (for SIGNERS):	Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)
Email:	Access to a valid email account
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	•Allow per session cookies •Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection

** These minimum requirements are subject to change. If these requirements change, we will provide you with an email message at the email address we have on file for you at that

time providing you with the revised hardware and software requirements, at which time you will have the right to withdraw your consent.

Acknowledging your access and consent to receive materials electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the 'I agree' button below.

By checking the 'I Agree' box, I confirm that:

- I can access and read this Electronic CONSENT TO ELECTRONIC RECEIPT OF ELECTRONIC RECORD AND SIGNATURE DISCLOSURES document; and
- I can print on paper the disclosure or save or send the disclosure to a place where I can print it, for future reference and access; and
- Until or unless I notify Johns Hopkins University – Technology Ventures as described above, I consent to receive from exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to me by Johns Hopkins University – Technology Ventures during the course of my relationship with you.

*****Certain information contained herein has been omitted pursuant to Regulation S-K 601(b)(10).**
Confidential treatment has been granted with respect to the omitted portions.

Exhibit 10.38

TRANSITION AND SEPARATION AGREEMENT

ition and Separation Agreement (the "Agreement") by and between Nathaniel David ("Executive") and Unity Biotechnology, Inc., a Delaware corporation (the "Company"), is made effective as of the date Executive signs this Agreement (the "Effective Date") with reference to the following facts:

A. Executive's employment with the Company and each of its affiliates will end effective upon the Termination Date (as defined below).

B. Executive and the Company want to end their relationship amicably and establish the obligations of the parties including, without limitation, all amounts due and owing to the Executive.

EREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties agree as follows:

1. Termination Date. Executive acknowledges and agrees that Executive's status as an employee and an officer of the Company shall end effective as of the earliest of (a) December 31, 2020 (the "Planned Termination Date"), (b) the date Executive takes any action that constitutes Cause (as defined in that certain Employment Agreement by and between Executive and the Company dated as of January 29, 2018, as amended March 9, 2020 (the "Employment Agreement")) or (c) the date Executive voluntarily resigns Executive's employment with the Company (the earliest such date, the "Termination Date"). For the avoidance of doubt, in the event the Company terminates Executive's employment for other than Cause, then Executive shall continue to be paid as though Executive continued employment through the Planned Termination Date and, subject to the terms and conditions of Section 5, shall be entitled to the Separation Payments and Benefits described in Section 5. Executive hereby agrees to execute such further document(s) as shall be determined by the Company as necessary or desirable to give effect to the termination of Executive's status as an officer of the Company.

2. Continued Employment.

(a) *Employment Period*. From the Effective Date through the Termination Date (the "Employment Period"), Executive shall remain employed by the Company as the Company's President and shall continue to serve as a member of the Board of Directors of the Company (the "Board").

(b) *Salary and Benefits Continuation*. During the Employment Period, Executive will continue to be paid base salary at the rate in effect on the Effective Date, accrue paid vacation, be eligible for all employee benefit plans available to senior executives of the Company and continue to vest into outstanding equity awards in accordance with their terms. All payments made to Executive during the Employment Period will be subject to required withholding taxes and authorized deductions.

(c) *Equity Awards*. Absent any agreement between Executive and the Company to the contrary that is entered into on or prior the Termination Date, effective as of the Termination Date, Executive's equity awards in the Company that are outstanding as of immediately prior to the Termination Date (collectively, the "Equity Awards") shall cease vesting and any unvested shares subject thereto shall be forfeited and shall cease to be outstanding without any further action by the Company or Executive.

(d) *Protection of Information*. Executive agrees that, during the Employment Period and thereafter, Executive will not, except for the purposes of performing Executive's duties during the Employment Period, seek to obtain any confidential or proprietary information or materials of the Company.

3. Continued Board Service. Following the Planned Termination Date, Executive shall continue to serve as a member of the Company's Board of Directors (the "Board").

4. Final Paycheck; Payment of Accrued Wages and Expenses. As soon as administratively practicable on or after the Termination Date, the Company will pay Executive all accrued but unpaid base salary and all accrued and unused vacation earned through the Termination Date, subject to standard payroll deductions and withholdings. The Company will also reimburse Executive for all outstanding expenses incurred prior to the Termination Date which are consistent with the Company's policies in effect from time to time with respect to travel, entertainment and other business expenses, subject to the Company's requirements with respect to reporting and documenting such expenses. Executive is entitled to these payments regardless of whether Executive executes this Agreement or a Release of Claims (as defined below).

5. Separation Payments and Benefits. Without admission of any liability, fact or claim, the Company hereby agrees, subject to: (i) the execution of this Agreement, (ii) the delivery to the Company of a copy of the General Release of Claims attached hereto as Exhibit A (the "Release of Claims") signed on or after the Planned Termination Date that becomes effective and irrevocable within sixty (60) days following the Planned Termination Date, (iii) Executive remaining employed hereunder through the Planned Termination Date and (iv) Executive's continued compliance with the terms and conditions of the At-Will Employment, Confidential Information, Invention and Assignment, and Arbitration Agreement by and between Executive and the Company dated as of August 24, 2016 (the "Confidentiality Agreement"), to provide Executive the severance benefits set forth below. For the avoidance of doubt, in the event the Company terminates Executive's employment for other than Cause before the Planned Termination Date, then Executive shall be deemed to have continued employment through the Planned Termination Date and remain eligible for the Separation Payments and Benefits described in this Section 5, subject to the other terms and conditions set forth in the preceding sentence. Specifically, in the event the terms and conditions of this Section 5 are satisfied, the Company and Executive agree as follows:

(a) *Base Salary Severance*. Executive shall be entitled to receive an amount equal to $345,937.50, less applicable withholdings and deductions, which represents nine months of Executive's base salary at the rate in effect on the Effective Date, less applicable withholdings and deductions, on the Company's first payroll date following the date the Release of Claims becomes effective and irrevocable.

(b) *2020 Bonus*. Executive shall be entitled to receive an amount equal to the annual bonus Executive otherwise would have received for fiscal year 2020, if any, determined based on the actual performance of the Company, payable in a cash lump sum, less applicable withholdings and deductions, on the date that annual bonuses for fiscal year 2020 are paid to other executives of the Company, but in no event later than March 15, 2021.

(c) *Healthcare Continuation Coverage*. If Executive elects to receive continued healthcare coverage pursuant to the provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall directly pay, or reimburse Executive for, the premiums for Executive and Executive's covered dependents at the same levels in effect on the Termination Date during the period commencing on the Termination Date and ending on the earlier to occur of (i) the nine

month anniversary of the Termination Date and (ii) the date Executive becomes eligible for comparable coverage under another employer's plans, provided, however that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the remaining continuation coverage period. After the Company ceases to pay premiums pursuant to the preceding sentence, Executive may, if eligible, elect to continue healthcare coverage at Executive's expense in accordance with the provisions of COBRA. Executive acknowledges that Executive shall be solely responsible for all matters relating to Executive's continuation of coverage pursuant to COBRA, including, without limitation, Executive's election of such coverage and Executive's timely payment of premiums.

(d) *Taxes*. Executive understands and agrees that all payments under this Agreement will be subject to appropriate tax withholding and other deductions. To the extent any taxes may be payable by Executive for the benefits provided to Executive by this Agreement beyond those withheld by the Company, Executive agrees to pay them and to indemnify and hold the Company and the other entities released herein harmless for any tax claims or penalties, and associated attorneys' fees and costs, resulting from any failure by Executive to make required payments.

(e) *Sole Separation Benefit*. Executive agrees that the payments and benefits provided by this Section 5 are not required under the Company's normal policies and procedures and are provided as a severance solely in connection with this Agreement. Executive acknowledges and agrees that the payments and benefits referenced in this Section 5 constitute adequate and valuable consideration, in and of themselves, for the promises contained in this Agreement.

6. Full Payment. Executive acknowledges that the payment and arrangements herein shall constitute full and complete satisfaction of any and all amounts properly due and owing to Executive as a result of Executive's employment with the Company and the termination thereof. Executive further acknowledges that, other than the Confidentiality Agreement and the agreements evidencing the Equity Awards, this Agreement shall supersede each agreement entered into between Executive and the Company regarding Executive's employment, including, without limitation, the Employment Agreement, any other offer letter, employment agreement, severance and/or change in control agreement, and each such agreement shall be deemed terminated and of no further effect as of the Effective Date.

7. Executive's Release of the Company. Executive understands that by agreeing to the release provided by this Section 7, Executive is agreeing not to sue, or otherwise file any claim against, the Company or any of its directors, officers, employees, investors or other agents for any reason whatsoever based on anything that has occurred as of the date Executive signs this Agreement.

(a) On behalf of Executive and Executive's heirs, assigns, executors, administrators, trusts, spouse and estate, Executive hereby releases and forever discharges the "Releasees" hereunder, consisting of the Company, and each of its owners, affiliates, subsidiaries, predecessors, successors, assigns, agents, directors, officers, partners, employees, and insurers, and all persons acting by, through, under or in concert with them, or

any of them, of and from any and all manner of action or actions, cause or causes of action, in law or in equity, suits, debts, liens, contracts, agreements, promises, liability, claims, demands, damages, loss, cost or expense, of any nature whatsoever, known or unknown, fixed or contingent (hereinafter called "Claims"), which Executive now has or may hereafter have against the Releasees, or any of them, by reason of any matter, cause, or thing whatsoever from the beginning of time to the date hereof, including, without limiting the generality of the foregoing, any Claims arising out of, based upon, or relating to Executive's hire, employment, remuneration or resignation by the Releasees, or any of them, Claims arising under federal, state, or local laws relating to employment, Claims of any kind that may be brought in any court or administrative agency, including any Claims arising under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000, et seq.; Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; Civil Rights Act of 1866, and Civil Rights Act of 1991; 42 U.S.C. § 1981, et seq.; Equal Pay Act, as amended, 29 U.S.C. § 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Executive Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; the Worker Adjustment and Retraining Notification Act, as amended, 29 U.S.C. § 2101 et seq.; the California Fair Employment and Housing Act, as amended, Cal. Lab. Code § 12940 et seq.; the California Equal Pay Law, as amended, Cal. Lab. Code §§ 1197.5(a),199.5; the Moore-Brown-Roberti Family Rights Act of 1991, as amended, Cal. Gov't Code §§12945.2, 19702.3; California Labor Code §§ 1101, 1102; the California WARN Act, California Labor Code §§ 1400 et. seq.; and California Labor Code §§ 1102.5(a),(b), Claims for wages under the California Labor Code and any other federal, state or local laws of similar effect, Claims under the employment and civil rights laws of California, Claims for breach of contract, Claims arising in tort, including, without limitation, Claims of wrongful dismissal or discharge, discrimination, harassment, retaliation, fraud, misrepresentation, defamation, libel, infliction of emotional distress, violation of public policy, and/or breach of the implied covenant of good faith and fair dealing, and Claims for damages or other remedies of any sort, including, without limitation, compensatory damages, punitive damages, injunctive relief and attorney's fees.

(b) Notwithstanding the generality of the foregoing, Executive does not release the following claims:

(i) Claims under this Agreement;

(ii) Claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law;

(iii) Claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company;

(iv) Claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA;

(v) Claims to any benefit entitlements vested as the Termination Date, pursuant to written terms of any Company employee benefit plan;

(vi) Claims for indemnification under Executive's indemnification agreement with the Company, the Company's Bylaws, California Labor Code Section 2802 or any other applicable law; and

(vii) Executive's right to bring to the attention of the Equal Employment Opportunity Commission claims of discrimination; *provided*, *however*, that Executive does release Executive's right to secure any damages for alleged discriminatory treatment.

(c) EXECUTIVE ACKNOWLEDGES THAT EXECUTIVE HAS BEEN ADVISED OF AND IS FAMILIAR WITH THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

BEING AWARE OF SAID CODE SECTION, EXECUTIVE HEREBY EXPRESSLY WAIVES ANY RIGHTS EXECUTIVE MAY HAVE THEREUNDER, AS WELL AS UNDER ANY OTHER STATUTES OR COMMON LAW PRINCIPLES OF SIMILAR EFFECT.

8. Executive Representations. Executive warrants and represents that (a) Executive has not filed or authorized the filing of any complaints, charges or lawsuits against the Company or any affiliate of the Company with any governmental agency or court, and that if, unbeknownst to Executive, such a complaint, charge or lawsuit has been filed on Executive's behalf, Executive will immediately cause it to be withdrawn and dismissed, (b) Executive has reported all hours worked as of the date of this Agreement and has been paid all compensation, wages, bonuses, commissions, and/or benefits to which Executive may be entitled and which are due through the date of this Agreement and no other compensation, wages, bonuses, commissions and/or benefits are due to Executive, except as provided in this Agreement, (c) Executive has no known workplace injuries or occupational diseases and has been provided and/or has not been denied any leave requested under the Family and Medical Leave Act or any similar state law, (d) the execution, delivery and performance of this Agreement by Executive does not and will not conflict with, breach, violate or cause a default under any agreement, contract or instrument to which Executive is a party or any judgment, order or decree to which Executive is subject, and (e) upon the execution and delivery of this Agreement by the Company and Executive, this Agreement will be a valid and binding obligation of Executive, enforceable in accordance with its terms.

9. No Assignment by Executive. Executive warrants and represents that no portion of any of the matters released herein, and no portion of any recovery or settlement to which Executive might be entitled, has been assigned or transferred to any other person, firm or corporation not a party to this Agreement, in any manner, including by way of subrogation or operation of law or otherwise. If any claim, action, demand or suit should be made or instituted against the Company or any other Releasee because of any actual assignment, subrogation or transfer by Executive, Executive agrees to indemnify and hold harmless the Company and all other Releasees against such claim, action, suit or demand, including necessary expenses of investigation, attorneys' fees and costs. In the event of Executive's death, this Agreement shall inure to the benefit of Executive and Executive's executors, administrators, heirs, distributees, devisees, and legatees. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only upon Executive's death by will or operation of law.

10. Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of

California or, where applicable, United States federal law, in each case, without regard to any conflicts of laws provisions or those of any state other than California.

11. Miscellaneous. This Agreement, collectively with the Confidentiality Agreement, the indemnification agreement between Executive and the Company and the agreements evidencing the Equity Awards, comprises the entire agreement between the parties with regard to the subject matter hereof and supersedes, in their entirety, any other agreements between Executive and the Company with regard to the subject matter hereof, including without limitation, the Employment Agreement. The Company and Executive acknowledge that the termination of the Executive's employment with the Company is intended to constitute a separation from service for the purposes of Section 409A of the Code, and the related Department of Treasury regulations. Executive acknowledges that there are no other agreements, written, oral or implied, and that Executive may not rely on any prior negotiations, discussions, representations or agreements. This Agreement may be modified only in writing, and such writing must be signed by both parties and recited that it is intended to modify this Agreement. This Agreement may be executed in separate counterparts, each of which is deemed to be an original and all of which taken together constitute one and the same agreement.

12. Company Assignment and Successors. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise). This Agreement shall be binding upon and inure to the benefit of the Company and its successors, assigns, personnel and legal representatives.

13. Maintaining Confidential Information; Whistleblower Protection. Executive acknowledges and agrees that the payments and benefits provided in Section 5 above shall be subject to Executive's continued compliance with Executive's obligations under the Confidentiality Agreement. For the avoidance of doubt, nothing in the Confidentiality Agreement or this Agreement will be construed to prohibit Executive from filing a charge with, reporting possible violations to, or participating or cooperating with any governmental agency or entity, including but not limited to the EEOC, the Department of Justice, the Securities and Exchange Commission, Congress, or any agency Inspector General, or making other disclosures that are protected under the whistleblower, anti-discrimination, or anti-retaliation provisions of federal, state or local law or regulation. Executive does not need the prior authorization of the Company to make any such reports or disclosures, and Executive is not required to notify the Company that Executive has made such reports or disclosures. Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in the Confidentiality Agreement or this Agreement: (i) Executive shall not be in breach of the Confidentiality Agreement or this Agreement, and shall not be held criminally or civilly liable under any federal or state trade secret law (x) for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (y) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (ii) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

14. Executive's Cooperation. After the Termination Date, Executive shall cooperate with the Company and its affiliates, upon the Company's reasonable request, with respect to any internal investigation or administrative, regulatory or judicial proceeding involving matters within the scope of Executive's duties and responsibilities to the Company or its affiliates during Executive's employment with the Company (including, without limitation, Executive being

available to the Company upon reasonable notice for interviews and factual investigations, appearing at the Company's reasonable request to give testimony without requiring service of a subpoena or other legal process, and turning over to the Company all relevant Company documents which are or may have come into Executive's possession during Executive's employment); *provided*, *however*, that any such request by the Company shall not be unduly burdensome or interfere with Executive's personal schedule or ability to engage in gainful employment.

(Signature page(s) follow)

:SS WHEREOF, the undersigned have caused this Transition and Separation Agreement to be duly executed and delivered as of the date indicated next to their respective signatures below.

DATED: December 12, 2020

/s/ Nathaniel David
Nathaniel David

UNITY BIOTECHNOLOGY, INC.

DATED: December 12, 2020

By: /s/ Anirvan Ghosh
Name: Anirvan Ghosh
Title: CEO

EXHIBIT A

GENERAL RELEASE OF CLAIMS

al Release of Claims ("Release") is entered into as of December 31, 2020 between Nathaniel David ("Executive") and Unity Biotechnology, Inc., a Delaware corporation (the "Company") (together referred to herein as the "Parties"), effective eight days after Executive's signature hereto (the "Effective Date"), unless Executive revokes Executive's acceptance of this Release as provided in Paragraph 1(c), below.

1. Executive's Release of the Company. Executive understands that by agreeing to this Release, Executive is agreeing not to sue, or otherwise file any claim against, the Company or any of its directors, officers, employees, investors or other agents for any reason whatsoever based on anything that has occurred as of the date Executive signs this Release.

(a) *Released Claims.* On behalf of Executive and Executive's heirs, assigns, executors, administrators, trusts, spouse and estate, Executive hereby releases and forever discharges the "Releasees" hereunder, consisting of the Company, and each of its owners, affiliates, subsidiaries, predecessors, successors, assigns, agents, directors, officers, partners, employees, and insurers, and all persons acting by, through, under or in concert with them, or any of them, of and from any and all manner of action or actions, cause or causes of action, in law or in equity, suits, debts, liens, contracts, agreements, promises, liability, claims, demands, damages, loss, cost or expense, of any nature whatsoever, known or unknown, fixed or contingent (hereinafter called "Claims"), which Executive now has or may hereafter have against the Releasees, or any of them, by reason of any matter, cause, or thing whatsoever from the beginning of time to the date hereof, including, without limiting the generality of the foregoing, any Claims arising out of, based upon, or relating to Executive's hire, employment, remuneration or resignation by the Releasees, or any of them, Claims arising under federal, state, or local laws relating to employment, Claims of any kind that may be brought in any court or administrative agency, including any Claims arising under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000, et seq.; Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; Age Discrimination in Employment Act, as amended, 29 U.S.C. § 621, et seq. (the "ADEA"); Civil Rights Act of 1866, and Civil Rights Act of 1991; 42 U.S.C. § 1981, et seq.; Equal Pay Act, as amended, 29 U.S.C. § 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Executive Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; the Worker Adjustment and Retraining Notification Act, as amended, 29 U.S.C. § 2101 et seq.; the California Fair Employment and Housing Act, as amended, Cal. Lab. Code § 12940 et seq.; the California Equal Pay Law, as amended, Cal. Lab. Code §§ 1197.5(a),199.5; the Moore-Brown-Roberti Family Rights Act of 1991, as amended, Cal. Gov't Code §§12945.2, 19702.3; California Labor Code §§ 1101, 1102; the California WARN Act, California Labor Code §§ 1400 et. seq.; and California Labor Code §§ 1102.5(a),(b), Claims for wages under the California Labor Code and any other federal, state or local laws of similar effect, Claims under the employment and civil rights laws of California, Claims for breach of contract, Claims arising in tort, including, without limitation, Claims of wrongful dismissal or discharge, discrimination, harassment, retaliation, fraud, misrepresentation, defamation, libel, infliction of emotional distress, violation of public policy, and/or breach of the implied covenant of good faith and fair dealing, and Claims for damages or other remedies of any sort, including,

without limitation, compensatory damages, punitive damages, injunctive relief and attorney's fees.

(b) *Unreleased Claims.* Notwithstanding the generality of the foregoing, Executive does not release the following claims:

(i) Claims under that certain Transition and Separation Agreement entered into between the Parties as of December 12, 2020 (the "Transition and Separation Agreement");

(ii) Claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law;

(iii) Claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company;

(iv) Claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA;

(v) Claims to any benefit entitlements vested as the Termination Date (as defined in the Transition and Separation Agreement), pursuant to written terms of any Company employee benefit plan;

(vi) Claims for indemnification under the indemnification agreement between Executive and the Company, the Company's Bylaws, California Labor Code Section 2802 or any other applicable law; and

(vii) Executive's right to bring to the attention of the Equal Employment Opportunity Commission claims of discrimination; *provided*, *however*, that Executive does release Executive's right to secure any damages for alleged discriminatory treatment.

(c) *Acknowledgement.* Executive acknowledges that Executive is knowingly and voluntarily waiving and releasing any rights Executive may have under the ADEA. Executive also acknowledges that the consideration given for the waiver and release herein is in addition to anything of value to which Executive was already entitled. Executive further acknowledges that Executive has been advised by this writing, as required by the ADEA, that:

(i) Executive's waiver and release do not apply to any rights or claims that may arise after the execution date of this Agreement;

(ii) Executive has been advised hereby that Executive has the right to consult with an attorney prior to executing this Agreement;

(iii) Executive has twenty-one (21) days to execute this Agreement (although Executive may choose to voluntarily execute this Agreement earlier);

(iv) Executive has seven (7) days following the execution of this Agreement by Executive to revoke the Agreement. If Executive wishes to revoke this Agreement, Executive must deliver notice of Executive's revocation in writing, no

later than 5:00 p.m. Pacific Time on the 7th day following Executive's execution of this Agreement to legal@unitybiotechnology.com. Executive understands that if Executive revokes this Agreement, it will be null and void in its entirety, and Executive will not be entitled to any payments or benefits provided by Section 5 of the Transition and Separation Agreement unless and until such seven (7) day period has expired;

(v) this Agreement will not be effective until the date upon which the revocation period has expired, which will be the eighth (8th) day after this Agreement is executed by Executive; and

(vi) this Agreement does not affect Executive's ability to test the knowing and voluntary nature of this Agreement.

(d) EXECUTIVE ACKNOWLEDGES THAT EXECUTIVE HAS BEEN ADVISED OF AND IS FAMILIAR WITH THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

BEING AWARE OF SAID CODE SECTION, EXECUTIVE HEREBY EXPRESSLY WAIVES ANY RIGHTS EXECUTIVE MAY HAVE THEREUNDER, AS WELL AS UNDER ANY OTHER STATUTES OR COMMON LAW PRINCIPLES OF SIMILAR EFFECT.

2. Executive Representations. Executive warrants and represents that (a) Executive has not filed or authorized the filing of any complaints, charges or lawsuits against the Company or any of its affiliates with any governmental agency or court, and that if, unbeknownst to Executive, such a complaint, charge or lawsuit has been filed on Executive's behalf, Executive will immediately cause it to be withdrawn and dismissed, (b) Executive has reported all hours worked as of the date of this Release and has been paid all compensation, wages, bonuses, commissions, and/or benefits to which Executive may be entitled and no other compensation, wages, bonuses, commissions and/or benefits are due to Executive, except as provided in Section 5 of the Transition and Separation Agreement, (c) Executive has no known workplace injuries or occupational diseases and has been provided and/or has not been denied any leave requested under the Family and Medical Leave Act or any similar state law, (d) the execution, delivery and performance of this Release by Executive does not and will not conflict with, breach, violate or cause a default under any agreement, contract or instrument to which Executive is a party or any judgment, order or decree to which Executive is subject, and (e) upon the execution and delivery of this Release by the Company and Executive, this Release will be a valid and binding obligation of Executive, enforceable in accordance with its terms.

3. Maintaining Confidential Information. Executive reaffirms Executive's obligations under the Confidentiality Agreement (within the meaning of the Transition and Separation Agreement). Executive acknowledges and agrees that the payments provided in Section 5 of the Transition and Separation Agreement shall be subject to Executive's continued compliance with Executive's obligations under the Confidentiality Agreement. For the avoidance of doubt, nothing in the Confidentiality Agreement, the Transition and Separation Agreement or this Release

will be construed to prohibit Executive from filing a charge with, reporting possible violations to, or participating or cooperating with any governmental agency or entity, including but not limited to the EEOC, the Department of Justice, the Securities and Exchange Commission, Congress, or any agency Inspector General, or making other disclosures that are protected under the whistleblower, anti-discrimination, or anti-retaliation provisions of federal, state or local law or regulation. Executive does not need the prior authorization of the Company to make any such reports or disclosures, and Executive is not required to notify the Company that Executive has made such reports or disclosures. Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in the Confidentiality Agreement, the Transition and Separation Agreement or this Release: (i) Executive shall not be in breach of the Confidentiality Agreement, the Transition and Separation Agreement or this Release, and shall not be held criminally or civilly liable under any federal or state trade secret law (x) for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (y) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (ii) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

4. Cooperation With the Company. Executive reaffirms Executive's obligations to cooperate with the Company pursuant to Section 14 of the Transition and Separation Agreement.

5. Severability. The provisions of this Release are severable. If any provision is held to be invalid or unenforceable, it shall not affect the validity or enforceability of any other provision.

6. Choice of Law. This Release shall in all respects be governed and construed in accordance with the laws of the State of California, including all matters of construction, validity and performance, without regard to conflicts of law principles.

7. Integration Clause. This Release and the Transition and Separation Agreement, collectively with the Confidentiality Agreement, the indemnification agreement between Executive and the Company and the agreements evidencing the Equity Awards, contain the Parties' entire agreement with regard to the transition and separation of Executive's employment, and supersede and replace any prior agreements as to those matters, whether oral or written. This Release may not be changed or modified, in whole or in part, except by an instrument in writing signed by Executive and the Chief Executive Officer of the Company.

8. Execution in Counterparts. This Release may be executed in counterparts with the same force and effectiveness as though executed in a single document. Facsimile or electronic signatures shall have the same force and effectiveness as original signatures.

9. Intent to be Bound. The Parties have carefully read this Release in its entirety; fully understand and agree to its terms and provisions; and intend and agree that it is final and binding on all Parties.

:SS WHEREOF, the undersigned have caused this General Release of Claims to be duly executed and delivered as of the date indicated next to their respective signatures below.

DATED: December 31, 2020

Nathaniel David

UNITY BIOTECHNOLOGY, INC.

DATED: December 31, 2020

By: _____
Name: Anirvan Ghosh
Title: CEO

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-3 No. 333-231893) and related Prospectus of Unity Biotechnology, Inc.,

(2) Registration Statement (Form S-8 No. 333-224726) pertaining to the 2013 Equity Incentive Plan, the 2018 Incentive Award Plan and, 2018 Employee Stock Purchase Plan of Unity Biotechnology, Inc.,

(3) Registration Statement (Form S-8 No. 333-230086) pertaining to the 2018 Incentive Award Plan and 2018 Employee Stock Purchase Plan of Unity Biotechnology, Inc.,

(4) Registration Statement (Form S-8 No. 333- 237088) pertaining to the 2018 Incentive Award Plan and 2018 Employee Stock Purchase Plan of Unity Biotechnology, Inc.,

(5) Registration Statement (Form S-8 No. 333-237474) pertaining to the 2020 Employment Inducement Incentive Plan of Unity Biotechnology, Inc., and

(6) Registration Statement (Form S-8 No. 333- 250926) pertaining to the 2020 Employment Inducement Incentive Award Plan, as amended of Unity Biotechnology, Inc.;

of our report dated March 23, 2021, with respect to the financial statements of Unity Biotechnology, Inc. included in this Annual Report (Form 10-K) of Unity Biotechnology, Inc. for the year ended December 31, 2020.

/s/ Ernst & Young LLP

Redwood City, California
March 23, 2021

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Anirvan Ghosh, certify that:

1. I have reviewed this Annual Report on Form 10-K of Unity Biotechnology, Inc. for the year ended December 31, 2020;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 23, 2021

By: /s/ Anirvan Ghosh

Anirvan Ghosh, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Lynne Sullivan, certify that:

1. I have reviewed this Annual Report on Form 10-K of Unity Biotechnology, Inc. for the year ended December 31, 2020;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 23, 2021

By: /s/ Lynne Sullivan

Lynne Sullivan
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Unity Biotechnology, Inc. (the "Company") on Form 10-K for the year ending December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anirvan Ghosh, Chief Executive Officer of the Company, and Lynne Sullivan, Chief Financial Officer of the Company, do each hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: March 23, 2021 By: /s/ Anirvan Ghosh

Anirvan Ghosh, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Date: March 23, 2021 By: /s/ Lynne Sullivan

Lynne Sullivan
Chief Financial Officer
(Principal Financial and Accounting Officer)